FORECAST OF THE NATION

1989 IV–1991-III

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GEORGIA STATE UNIVERSITY
COLLEGE OF BUSINESS ADMINISTRATION

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MUDDLING THROUGH

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SUMMARY

All the engines of growth that pulled economic activity upward early in this expansion have now been exhausted. Low savings rates and a high debt structure have changed the consumer from a leader to a reactor to economic changes. A resurging dollar has snuffed out the engine of export growth and generated a stalled industrial economy. Budget restraints prevent the federal government from launching any new initiatives. At the same time, changing world conditions have created a political climate that leads to spending restraints in defense. High capital costs limit any capital spending initiatives, while the high costs of housing prevent small declines in interest rates from stimulating a surge in construction.

At the same time, the economic imbalances and strains that normally signal the end of an economic expansion are nowhere in sight. Except for the perennial sales and production imbalances created by the auto industry, no inventory excesses are apparent. While housing sells slowly, vacancy rates remain normal for single family units and are gradually declining for apartments. Office vacancy rates remain high, but they are coming down. Sensitive commodity prices are directionless, capacity utilization is modestly drifting down, delivery delays are continuing to shorten, and interest rates are slowly drifting lower. Only the low unemployment rate and the upward drift in labor costs show any signs that normally precede a downturn (although the yield curve continues to hover near inverted status).

Thus, there is little economic evidence to suggest that the expansion's average growth rate can persist without help from somewhere. Yet, there also is scant evidence that the economy is approaching a downturn. In effect, the economy appears to be muddling through. This is not the same as a soft landing, because that phrase usually means that inflation will recede without suffering a recession. While no recession may be suffered, inflation is not receding, but gradually strengthening. After rising by 4.2% in 1989 and 1990, the implicit price deflator should increase 4.5% in 1991. Consumer prices should increase 5.1% in 1991 following only a modest slowing from 4.9% in 1989 to 4.6% in 1990.

Yet, stagflation, where inflation rises and economic activity slows, also is too strong a word for the current condition. GNP growth should slow from 3% this year to only 2.1% in 1990 and 2.0% in 1991, but rising inflation does not cause the slowing in growth, at least until 1991.

As inflation and growth become more stable, interest rates and asset values could become more volatile. The prime rate should fall a percentage point early in 1990 and then rise by nearly 2 percentage points by the middle of 1991. Yields on long-term government bonds should average less than 8% next year and then reach 9% a year later. After soaring 20% this year, the Dow Jones should show little change next year and could actually fall to less than 2300 in 1991 before again rallying late that year. Throughout these gyrations, the unemployment rate should move only slightly higher from current levels.

OUTLOOK

Much of the 2.5% growth in economic activity during the summer months was caused by strong consumer spending. A combination of strong sales incentives and the announcement that prices for domestically produced cars would rise sharply during the fall caused consumers to dip into savings in order to purchase cars ahead of expected price increases. Similarly, strong discounting of clothing prices led to a surge of activity there, while falling gasoline prices released purchasing power to seek stronger gains in other retailing and services as well.

Normally, such prebuying would lead to weakness in inventory accumulation and only modest changes in production activity. Auto inventories were depleted, but strong imports added enough to inventory to offset depleted domestic stocks. After inflation, the trade deficit soared by $17.1 billion. Thus, the fourth quarter slump in consumer spending should be combined with a slump in imports and improvement in the trade balances once again.

While a little of this normal pattern will emerge, some of the trade weakness was caused by sluggish export activity. The world economy is continuing to expand by more than 4%. Indeed, some Latin American nations appear to be ending their decade long stupor, normally a good sign for U.S. exports. However, the dollar's rebound has reduced American competitiveness and slowed export growth. Also, a strike at Boeing will begin to slow aircraft exports, again cutting into trade balances. Eventually, that strike will end but the weakness in trade balances generated by it already will begin undermining the dollar's value. This will allow a significant rebound in export activity later next year. In the meantime, however, the trade deficits will remain substantial and export growth will be sluggish.

Of course, consumption is not production. The slowing in auto sales during the fall will occur even as auto production will be rising to replace the depleted auto stock from the summer sales. This will add to inventories, requiring production corrections in autos and related industries, such as metals, carpets, and plastics, early in 1990. Therefore, a period of minimal growth will be occurring during the next two quarters.

At the same time the Federal Reserve is expected to moderately ease credit conditions. Although inflation will be higher by year-end than during the third quarter, the Fed certainly knows that changes in energy prices largely accounts for those differences. Labor costs are gradually rising, but a recession causing reversal of such upward drift is not politically appropriate. Therefore, the Federal Reserve will ignore the inflationary drift and respond to the near recessionary slowing of economic conditions.

While the expected reductions in interest rates are not substantial--about a percentage point for mortgage rates, the prime rate, and federal funds rates--they will reverse the current drop in construction activity. Also, Hurricane Hugo and the San Francisco earthquake have created about $12 billion of repairs and rebuilding. The impact from these natural disasters will begin to be registered in construction expenditures in the public and private sector during the fourth quarter. Further gains in construction spending will develop early in 1990. By the time the disaster rebuilding begins subsiding, lower interest rates should begin to increase housing activity. Certainly, the 1990 strength in construction will not be sufficient to pull the economy ahead, it will provide strength when the auto adjustments and the Boeing strike are creating weakness.

Of course, consumer concerns could lead to more substantial weakness than currently is projected early next year. In that case, the inventory correction in autos will not be completed while other inventory excesses may pile up. A full scale recession still could materialize, probably 1 chance in 4. However, the consumer already has slowed consumption of durables and nondurables. While still not high, the savings rate has increased by 2.2 percentage points in the past two years. This is not a picture of consumer spending that has soared above trend and is headed for a fall.

Increased layoffs and rising unemployment certainly would raise consumer worries sufficiently to generate a recession; but that puts the cart before the horse. In the absence of economic imbalances, from whence will the rising unemployment come?

Actually, one imbalance does exist, but no one has been troubled by it. With wage costs drifting upward and the strong dollar leading to price restraint for imported goods, most of the rising costs have not been passed on to the consumer. Falling interest rates have absorbed some of this cost squeeze, but operating profits have suffered the lion's share. From a peak of $340 billion during the fourth quarter of 1988, operating profits have fallen to an estimated $285 billion by this summer. Initially, the profits erosion was shielded by rising inventory profits early in the year as commodity prices soared. However, the reversal of those price changes has exposed the erosion in profitability. Almost daily, stock market analysts are marking down their estimates of earnings for this year and next. Earnings surprises on the downside have exceeded positive earnings surprises by more than 3 to 1.

Yet, stock prices have largely ignored this erosion in profitability. Falling interest rates and rising interest by foreign investors accounted for some of this benign behavior. At the same time, the boardrooms have been disappointed but reluctant to engage in significant cost cutting efforts. Many manufacturing firms already had become lean in the past two years. Our projections indicate that stock values will retain current levels but will not advance significantly during the next two years. Once the rise in equity values slow, managers may divert their attention from devices to generate stockholder value to reduced operating costs. If so, layoffs could rise and the consumer could then retrench. At this time, however, further profit erosion should be minor, leading to little effort to substantially pare costs and reduce employment.

Excluding sharp layoffs to control costs and restore profitability, the economy should be able to muddle through the next two years without a recession. Modest interest rate declines early next year should be sufficient to generate some growth in construction. Although capital spending should be modest early in the year, especially as truck activity will be down sharply, advanced technology for information systems and communications should lead to improved spending later in the year and into 1991. Also, once the auto imbalances are adjusted early next year and the Boeing problems have been resolved, some gains in industrial activity should develop. If the dollar weakens by 5% in 1990 and a further 4% in 1991, as currently projected, export activity should rebound and industrial activity should strengthen.

Unfortunately, by skirting a recession, the labor cost pressures do not subside. Strikes in aerospace and communications indicate that the long expansion has reduced job security concerns and replaced them with increased returns. In place of marginal tax rate reductions that may have aided the moderation of wage demands are higher minimum wage legislation, increased mandated benefits for workers, and a social security tax rate increase. Even with wage moderation assumed for the service sector, hourly wage compensation is expected to rise by 5.4% in 1990 and 1991.

By the latter part of 1990, the Federal Reserve is expected to again switch direction and begin to restrain monetary growth. Thus, a growth in the monetary base to a 7% rate early in 1990 will be replaced by monetary restraint before the year is out. Interest rates are expected to rebound and the economy should slow again in 1991. If a recession develops, the most likely time will be during this second period of monetary restraint by the middle of 1991. Indeed, our projections begin to show the economic conditions that normally develop near cyclical peaks about that time.

After seven years of economic expansion and contained inflation, muddling through may not be a bad outlook. To be sure, moderate growth and moderating inflation would be more satisfactory, but the labor market pressures are building and do not appear to be temporary in nature. Following several years of moderate changes, wage push inflation once again appears to be developing. Only a radical change in wage determination, where a large portion of labor's return is at risk to current economic performance either through bonuses or profit sharing, appears to be able to permanently remove cost push pressures from economic concern. In the absence of such wage contracts, periodic declines once again may be needed to restrain inflationary forces.

But why was there so much wage moderation during the past seven years? Foreign competition clearly restrained labor costs in exposed manufacturing activity. However, the restraint was caused by the typical forces of accepting lower returns for a better likelihood of retaining a job. Outside manufacturing, the reduced marginal tax rates provided real after tax returns without bothering the boss. Also, falling commodity prices provided a transfer of purchasing power from commodity owners, such as farmers and oil producers, to laborers. However, those forces are now subsiding. As a result, the economy is exposed to greater cost push pressures than in the past decade.

ASSUMPTIONS

The amazing developments in Europe have not been factored into this forecast. If democracy evolves in Eastern Europe and the borders come tumbling down, implications for the world economy are substantial. Although a surge of credits and large increases in imported goods to aid redevelopment in that part of the world could lead to a burst of inflationary forces, those price pressures would be limited. First, all nations may review their defense spending with an eye toward reducing resources for actual deployment. Research presumably would continue in the event that some nation may again wish to dominate others. But reallocation of defense resources to alternative uses may be possible. Certainly, the large budget deficits in Eastern Europe cannot be closed, and their currencies opened to international trading, without such restraint. Second, much of the turmoil occurred in Eastern Europe because their present system was inefficiently utilizing resources for the people. Reforms that lead to better resource allocation will generate growth opportunities in those countries. More productive Poles, Hungarians, and East Germans would be providing resources for world commerce to justify the development investments that they will receive. Some of their industry will displace some of ours, where they develop competitiveness and we choose not to or fail to. But their markets will expand, opening greater opportunities for our productive activities. Obviously, Europe will be the primary beneficiary of these developments, but we will benefit also.
If events continue to unfold as rapidly as current changes, economic effects will alter this forecast. In the short run, higher interest rates and more inflation are possible. In the longer-run, larger world markets and growth opportunities will replace any short-run dislocations. (But hopes also were high before the Chinese suppression. Thus, the above assumptions are premature.)

The Federal Reserve is assumed to have support only to contain inflation, not drive it toward zero. Therefore, when growth rates show a risk of recession, some easing is assumed. When growth rates rebound and inflation intensifies, Federal Reserve restraint is expected to return. Most of these assumptions are reflected in the monetary variables contained in table 6.

Neither Gramm-Rudman nor defense cutbacks have been assumed in the budgetary assumptions contained in table 5. Some increased excise taxes were assumed, but not substantial changes in tax codes not already mandated were assumed in the forecast period.

Other forecasted assumptions are as follows:

a. Oil imports are expected to increase by 3.5% in 1990 and 1.8% in 1991. Prices of imported oil are expected to average $17.61 per barrel in 1990 and $20.34 per barrel in 1991. No change in excise taxes was assumed during the forecast period.

b. No changes are expected in the cost of living adjustments for government programs. Adjustments of 4.7% were used for the next two fiscal years. Also, government wages were expected to grow by 4.0% next year and rise by 4.5% the year after.

c. The wage base for Social Security was assumed to be $50,400 in 1990 and $52,500 in 1991. No change in the tax treatment of government benefits was assumed in the forecast period. The tax rate was assumed to increase from 7.51% to 7.65% for employer and employee January 1990.

d. Minimum wage legislation, including a three month training wage with the potential for three additional months for teenagers was assumed with legislation raising the minimum to $3.85 April 1990 and $4.25 on April 1991.

e. World trade is expected to grow 5% in 1990 and 4% in 1991.

f. The end of the communications disruptions was assumed during the fall. Eastern airlines was assumed to reach their new planned schedules by January and the Boeing strike was expected to disrupt plane production and shipments through the first quarter of 1990. No other strike activity was assumed.

g. Postal rates were assumed to rise by more than 10% during the second quarter of 1991. No other significant pricing assumptions were made.

CONCLUSION

No strong growth engines currently are operating to pull the economy forward. At the same time, no significant imbalances exist that require a major correction. Despite worries about excess inventories, only auto inventories appear to be generating a problem at the present time. Some slowing in the economy will be required to remove this excess during the winter, but this should be only a minor slowing. Indeed, the weakness probably will lead to further reductions in interest rates that will begin to stimulate housing. At the same time, rebuilding following the Hugo and earthquake losses will provide some additional construction activity both in the public and private sectors. Modest economic growth should resume early next year.

Another more serious imbalance is the erosion of operating profits. Corporations may decide to cut costs in an effort to restore profitability by laying off workers. Such layoffs, in turn, could erode consumer confidence, leading to reduced consumer spending. Certainly, such conditions could lay the groundwork for a recession. At this time, however, a recession remains unlikely. Consumers are not engaging in excesses that require a return to more normal conditions, expect in the furniture and home improvement areas. Indeed, autos are their oldest in average age since the beginning of this decade while clothing sales have been weak for two years. Therefore, the hill off which consumer spending may fall cannot be very high.

On the other hand, inflation will remain a gnawing problem. A strong dollar has led to import price restraints that have restricted price gains for impacted industries in the U.S. But an erosion of trade balances probably will weaken the dollar. More significantly, low unemployment has diminished concern about employment security. Therefore, wage pressures are drifting upward. Some legislated changes, such as minimum wage legislation, higher social security taxes, and mandated benefit coverage, will add to these cost pressures. Therefore, inflation will remain stubbornly high in 1990 and begin accelerating again before the end of the year. Federal Reserve restraint to prevent accelerating inflation could lead to recession in the middle of 1991.

In the meantime, the economy probably will muddle through with no recession and no diminishing inflation. In the eighth year of an economic expansion, that may be a good performance.

Table 1.

U. S. Expenditures in Current Dollars
for 1989-II and 1989-III with Forecasts for 1989-IV through 1991-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	88/89	89/90	90/91	1989	1990	1991
1. Personal Consumption	3444.1	3509.5	3553.7	3613.2	3671.3	3733.8	3796.1	3864.8	3935.0	3997.2	7.3	6.7	7.1	3472.2	3703.6	3965.2
2. % Change(AR)	7.6	7.8	5.1	6.9	6.6	7.0	6.8	7.4	7.5	6.5						
3. Durable Goods	471.0	490.4	479.2	485.5	490.8	499.0	501.8	509.5	516.6	518.7	4.7	3.7	4.5	476.8	494.3	516.6
4. Autos, Trucks & Parts	212.9	230.0	214.7	220.3	224.3	231.5	231.1	236.8	241.3	241.3	2.7	4.4	5.9	217.3	226.8	240.1
5. Other Durable Goods	258.1	260.4	264.5	265.2	266.5	267.5	270.7	272.7	275.3	277.4	8.3	3.0	3.4	259.7	267.5	276.5
6. Nondurable Goods	1121.5	1128.9	1144.6	1161.3	1175.8	1192.1	1209.8	1228.2	1248.7	1265.4	6.7	5.5	6.1	1123.3	1184.8	1256.6
7. Services	1851.7	1890.1	1929.9	1966.4	2004.7	2042.7	2084.5	2127.1	2169.7	2213.1	8.4	8.1	8.3	1872.1	2024.6	2192.1
8. Pers Cons less Services	1592.4	1619.4	1623.8	1646.8	1666.6	1691.1	1711.6	1737.7	1765.3	1784.1	6.1	4.9	5.6	1600.1	1679.0	1773.2
9. % Change(AR)	7.3	7.0	1.1	5.8	4.9	6.0	4.9	6.2	6.5	4.3						
10. Pvt Domestic Invstment	775.0	791.0	794.3	792.8	816.4	830.7	851.6	863.2	863.2	861.4	4.3	5.2	5.4	782.5	822.9	867.7
11. Residential Structures	235.1	234.6	233.5	238.3	246.4	255.1	262.4	265.1	262.9	261.7	1.3	6.4	5.7	235.5	250.6	264.7
12. Other Structures	142.4	145.4	146.7	148.9	150.3	152.7	155.5	158.5	161.1	163.6	3.2	4.9	7.0	144.8	151.9	162.4
13. Producer's Durables	370.1	375.8	376.8	383.1	389.4	396.2	400.4	404.9	409.8	411.6	6.8	5.9	4.7	370.3	392.3	410.6
14. Change in Inventories	27.4	35.1	37.3	22.5	30.3	26.7	33.3	34.7	29.4	24.5				31.9	28.2	29.8
15. Chg in Nonfarm Inv	23.6	27.6	35.1	16.8	27.8	20.9	31.8	29.8	26.8	24.8				26.4	24.3	29.8
16. Net Exports	-50.6	-67.7	-68.8	-72.5	-66.0	-68.7	-75.9	-74.8	-63.2	-64.8				-60.3	-70.8	-68.6
17. Exports	626.1	618.6	630.9	642.8	654.9	661.5	674.6	692.5	712.1	723.5	13.3	6.2	8.8	620.3	658.5	716.5
18. Imports	676.6	686.3	699.7	715.3	720.9	730.2	750.5	767.3	775.3	788.3	9.5	7.2	7.7	680.6	729.2	785.3
19. Government Purchases	1033.2	1040.5	1073.8	1094.2	1102.2	1111.4	1132.9	1145.8	1160.9	1172.4	7.4	6.7	5.3	1040.9	1110.2	1168.5
20. Federal Purchases	406.0	403.1	422.0	430.6	430.1	429.8	442.2	444.2	448.4	449.5	6.9	6.3	4.1	407.5	433.2	451.1
21. Defense	301.3	306.2	310.3	316.9	318.4	319.0	320.4	326.0	328.1	328.7	2.1	4.8	3.0	304.1	318.7	328.2
22. Nondefense	104.7	96.8	111.7	113.7	111.7	110.8	121.8	118.2	120.3	120.8	24.2	10.7	7.4	103.4	114.5	123.0
23. State and Local	627.2	637.4	651.8	663.6	672.1	681.6	690.7	701.6	712.5	722.9	7.8	6.9	6.0	633.4	677.0	717.4
24. Gross National Product	5201.7	5273.2	5353.0	5427.7	5523.9	5607.2	5704.7	5799.0	5895.9	5966.2	7.3	6.3	6.6	5235.3	5565.9	5932.8
25. Net Change(amount)	88.6	71.5	79.8	74.7	96.2	83.3	97.5	94.3	96.9	70.3				354.6	330.6	366.9
26. % Change(curr$, AR)	7.1	5.6	6.2	5.7	7.3	6.2	7.1	6.8	6.9	4.9				7.3	6.3	6.6
27. Gross Natl Product(82$)	4132.5	4158.1	4175.3	4186.2	4220.7	4242.5	4267.9	4287.8	4312.4	4313.1	3.0	2.1	2.0	4143.2	4229.3	4313.1
28. % Change(1982$, AR)	2.5	2.5	1.7	1.0	3.3	2.1	2.4	1.9	2.3	0.1				3.0	2.1	2.0
29. Implicit Price Deflator	125.9	126.8	128.2	129.7	130.9	132.2	133.7	135.2	136.7	138.3	4.2	4.2	4.5	126.4	131.6	137.5
30. % Change(AR)	4.6	2.9	4.5	4.6	3.8	4.0	4.6	4.7	4.4	4.8				4.2	4.2	4.5
31. Final Sales(curr$)	5174.3	5238.1	5315.7	5405.2	5493.6	5580.5	5671.4	5764.3	5866.5	5941.7	7.3	6.4	6.6	5203.4	5537.7	5902.7
32. Net Change from Prev	88.9	63.8	77.6	89.5	88.4	86.9	90.9	92.9	102.2	75.2						
33. Final Sales(1982$)	4113.5	4127.9	4142.6	4168.8	4194.4	4220.8	4240.8	4259.8	4287.6	4292.0	3.0	2.2	1.9	4116.6	4206.2	4287.9

Table 2.

U. S. Real Expenditures
for 1989-II and 1989-III with Forecasts for 1989-IV through 1991-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	88/89	89/90	90/91	1989	1990	1991
1. Personal Consumption	2653.7	2691.2	2695.4	2712.4	2725.4	2745.9	2759.0	2777.0	2788.2	2798.3	2.8	2.4	2.1	2670.3	2735.7	2793.8
2. % Change(1982$, AR)	1.9	5.8	0.6	2.5	1.9	3.0	1.9	2.6	1.6	1.5						
3. Durable Goods	424.9	440.0	427.8	431.6	434.7	439.0	438.9	443.6	446.5	444.2	3.5	1.9	2.0	428.0	436.1	444.6
4. Autos, Trucks & Parts	177.0	192.0	177.9	181.8	184.8	190.1	188.5	191.9	194.0	192.1	0.9	3.1	3.1	180.8	186.3	192.1
5. Other Durable Goods	247.9	248.0	249.9	249.8	249.9	248.9	250.4	251.7	252.5	252.1	5.5	1.0	1.1	247.3	249.8	252.5
6. Nondurable Goods	909.7	918.6	922.0	926.0	926.2	932.2	935.1	939.1	938.0	940.8	1.3	1.5	1.1	916.3	929.9	940.4
7. Services	1319.0	1332.5	1345.6	1354.8	1364.5	1374.7	1385.0	1394.3	1403.7	1413.3	3.6	3.3	2.9	1326.0	1369.8	1408.8
8. Pvt Domestic Investment	719.8	735.2	733.5	724.7	742.9	749.0	760.6	764.3	760.9	754.3	1.6	2.3	2.3	727.4	744.3	761.4
9. Residential Structures	189.3	187.0	184.3	185.9	190.4	195.0	198.3	197.8	194.0	190.9	-2.6	1.8	0.9	189.1	192.4	194.2
10. Other Structures	118.1	119.8	119.9	120.3	120.2	120.9	121.6	122.4	123.1	123.6	-2.0	0.9	2.2	119.7	120.8	123.4
11. Producer's Durables	393.2	398.2	396.6	401.1	406.0	411.4	413.6	416.1	419.0	418.7	5.5	4.1	2.6	392.0	408.0	418.7
12. Change in Inventories	19.1	30.2	32.7	17.4	26.3	21.7	27.1	28.0	24.8	21.1				26.6	23.1	25.1
13. Chg in Nonfarm Inv	19.5	24.6	31.2	15.6	24.7	17.8	26.6	25.0	23.0	21.3				23.1	21.2	25.3
14. Net Exports	-51.2	-74.1	-75.4	-77.5	-72.2	-73.7	-79.6	-77.8	-64.4	-65.1				-63.9	-75.8	-69.4
15. Exports	587.5	587.5	602.6	611.6	619.0	621.1	626.4	635.3	645.6	648.3	10.7	5.6	4.2	586.8	619.5	645.8
16. Imports	638.7	661.6	678.0	689.1	691.2	694.8	706.0	713.1	710.0	713.4	7.6	6.8	2.9	650.7	695.3	715.3
17. Government Purchases	810.3	805.7	821.8	826.6	824.6	821.3	827.9	824.3	827.7	825.6	3.1	1.9	0.3	809.4	825.1	827.5
18. Federal Government	343.6	335.9	345.9	348.0	345.8	341.8	347.7	342.6	344.2	341.1	3.5	1.6	-0.6	340.2	345.8	343.7
19. Federal Purchases	217.1	208.9	218.0	220.0	217.7	213.6	219.4	214.1	215.6	212.4	4.7	2.1	-1.2	213.3	217.7	215.1
20. Value Added	126.5	127.0	127.9	128.0	128.1	128.2	128.3	128.5	128.6	128.7	1.4	0.9	0.4	127.0	128.2	128.7
21. State and Local Govt	466.7	469.9	475.9	478.6	478.8	479.5	480.2	481.7	483.5	484.5	2.8	2.2	0.9	469.2	479.3	483.7
22. State & Local Purch.	212.0	214.2	219.0	221.1	220.7	220.7	220.5	221.4	222.7	223.0	4.2	3.2	0.8	213.9	220.8	222.5
23. Value Added	254.7	255.7	256.9	257.5	258.1	258.8	259.7	260.3	260.8	261.5	1.7	1.3	1.1	255.3	258.5	261.3
24. Gross National Product	4132.5	4158.1	4175.3	4186.2	4220.7	4242.5	4267.9	4287.8	4312.4	4313.1	3.0	2.1	2.0	4143.2	4229.3	4313.1
25. % Change(1982$, AR)	2.5	2.5	1.7	1.0	3.3	2.1	2.4	1.9	2.3	0.1						
26. Final Sales Demand	4113.4	4127.9	4142.6	4168.8	4194.4	4220.8	4240.8	4259.8	4287.6	4292.0	3.0	2.2	1.9	4116.6	4206.2	4288.0
27. % Change(1982$, AR)	3.1	1.4	1.4	2.6	2.5	2.5	1.9	1.8	2.6	0.4						
28. Gross Domestic Product	4107.3	4137.4	4153.4	4164.3	4200.0	4223.4	4249.4	4269.0	4294.1	4295.0	3.1	2.2	2.0	4119.2	4209.3	4294.9
29. Government Contribution	381.2	382.7	384.8	385.5	386.2	387.0	388.0	388.8	389.4	390.2	1.6	1.2	0.8	382.2	386.7	389.9
30. Private Domestic Product	3726.1	3754.7	3768.6	3778.8	3813.8	3836.4	3861.4	3880.2	3904.7	3904.8	3.2	2.3	2.2	3737.0	3822.6	3905.0
31. % Change(1982$, AR)	3.0	3.1	1.5	1.1	3.8	2.4	2.6	2.0	2.5	0.0						

Table 3.

Income Related U. S. Gross National Product Components
for 1989-II and 1989-III with Forecasts for 1989-IV through 1991-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	88/89	89/90	90/91	1989	1990	1991
1. Compensation of Employees	3118.2	3170.5	3219.9	3289.2	3346.7	3405.5	3462.6	3528.4	3585.0	3635.0	8.1	7.4	7.0	3142.6	3376.0	3611.1
2. Wages & Salaries	2608.8	2653.3	2695.3	2746.6	2795.7	2845.9	2894.7	2947.0	2995.6	3037.8	8.3	7.3	7.0	2629.5	2820.7	3017.6
3. Manufacturing Ind	5[illegible]9	555.5	555.3	563.0	570.3	578.1	584.6	591.6	598.4	603.7	5.3	4.0	4.7	551.8	574.0	601.0
4. Other Producing Ind	183.8	186.5	190.2	194.7	197.5	200.5	204.1	206.2	207.1	207.5	7.5	7.6	4.4	185.2	199.2	208.0
5. Distributive Industry	610.8	619.6	632.0	642.6	653.6	664.8	676.4	688.6	699.4	709.0	7.6	7.2	6.9	615.3	659.4	704.6
6. Service Industry	790.8	811.5	830.0	848.9	870.4	891.8	912.8	932.9	956.7	976.8	12.0	10.1	9.7	800.2	881.0	966.6
7. Military Compensation	79.0	79.2	80.2	83.1	83.4	83.4	83.1	86.1	86.3	86.5	4.4	4.9	3.6	79.4	83.3	86.3
8. Other Government	394.5	401.0	407.6	414.3	420.5	427.3	433.7	441.6	447.7	454.3	7.4	6.6	6.4	397.7	424.0	451.2
9. Supplements to W & S	509.4	517.2	524.6	542.6	551.0	559.6	567.9	581.4	589.4	597.2	7.2	8.2	6.9	513.1	555.3	593.5
10. Proprietors Income	355.5	345.4	350.0	354.1	357.8	352.3	356.4	362.2	366.1	362.6	7.6	0.7	2.6	352.6	355.2	364.4
11. Business & Professional	304.7	308.2	312.4	311.5	313.2	315.4	317.8	319.5	321.2	322.1	6.4	2.6	2.3	306.4	314.5	321.8
12. Farm Proprietors	51.3	37.2	37.6	42.6	44.6	36.9	38.6	42.7	44.9	40.5	16.3	-12.1	4.8	46.3	40.7	42.6
13. Rental Income	9.8	4.8	1.5	8.6	9.5	9.3	10.2	10.5	11.3	11.8	-55.4	34.8	23.8	7.0	9.4	11.6
14. Net Interest	458.4	470.7	478.4	484.3	491.1	499.7	510.2	522.8	535.6	547.9	17.3	7.7	9.1	460.9	496.3	541.4
15. Corporate Profits(adj)	307.8	285.0	286.1	282.5	290.3	289.8	292.6	296.4	297.7	295.9	-9.1	-3.3	2.9	298.8	288.8	297.2
16. National Income	4249.6	4276.4	4335.9	4418.7	4495.4	4556.6	4632.0	4720.3	4795.7	4853.2	7.3	6.2	6.6	4261.8	4525.7	4825.7
17. Indirect Business Tax	413.4	421.3	426.5	434.0	440.5	449.7	456.8	465.9	473.8	482.1	6.0	6.7	7.3	417.2	445.3	477.9
18. Capital Consumption Adj	7.3	19.9	29.7	22.5	26.8	32.0	37.5	42.4	47.4	50.2	-			14.3	29.7	49.7
19. Capital Cons. Allowance	533.6	544.2	553.6	550.9	553.7	556.4	559.5	563.4	566.9	570.3	2.8	2.6	2.4	541.0	555.1	568.5
20. Business Transfers	31.5	32.2	32.9	33.6	34.3	35.0	35.8	36.5	37.3	38.1	9.6	8.9	8.8	31.9	34.7	37.7
21. Net Govt Subsidies	-15.5	-1.6	-9.1	-10.2	-8.0	-9.3	-12.5	-13.7	-12.1	-12.9	-38.1	-12.5	40.1	-11.4	-10.0	-14.0
22. Statistical Descrepancy	-14.8	-19.2	-16.5	-21.8	-18.8	-13.2	-4.4	-15.8	-18.1	-14.8				-17.6	-14.6	-13.4
23. Gross National Product	5201.7	5273.2	5353.0	5427.0	5523.9	5607.2	5704.7	5799.0	5895.9	5966.2	7.3	6.3	6.6	5235.3	5565.9	5932.8

Table 4.

Derivation of U. S. Personal Income
for 1989-II and 1989-III with Forecasts for 1989-IV through 1991-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	88/89	89/90	90/91	1989	1990	1991
1. National Income	4249.6	4276.4	4335.9	4418.7	4495.4	4556.6	4632.0	4720.3	4795.7	4853.2	7.3	6.2	6.6	4261.8	4525.7	4825.7
Less:																
2. Adj. Corporate Profits	307.8	285.0	286.1	282.5	290.3	289.8	292.6	296.4	297.7	295.9	-9.1	-3.3	2.9	298.8	288.8	297.2
3. Social Insurance	213.0	215.5	218.0	229.6	232.5	235.6	238.8	246.1	248.9	251.2	9.8	9.3	6.9	214.1	234.1	250.2
Plus:																
4. Government Transfers	595.3	603.4	610.6	633.5	641.5	648.7	655.6	676.6	685.1	692.5	7.7	7.7	6.8	598.7	644.8	688.5
5. Social Security, etc	322.9	327.6	331.7	346.6	350.7	354.2	357.8	370.5	374.7	377.8	8.1	8.5	6.8	324.8	352.3	376.2
6. Unemployment Benefits	14.1	14.4	14.6	14.6	14.8	14.6	14.6	14.7	15.0	15.4	8.8	3.5	3.2	14.2	14.7	15.1
7. Veterans Benefits	17.5	17.4	17.4	17.9	17.9	18.0	17.9	18.5	18.6	18.6	3.1	2.6	3.5	17.5	17.9	18.5
8. Employees Retirement	88.1	88.8	89.8	93.0	94.7	95.6	96.5	99.8	106.5	102.5	6.9	7.4	8.5	88.4	95.0	103.1
9. A. F. D. C.	17.7	17.6	17.6	17.8	17.9	18.0	18.2	18.5	18.6	18.7	2.3	2.0	3.9	17.6	18.0	18.7
10. Other Govt Transfers	134.9	137.4	139.5	143.6	145.5	148.3	150.6	154.6	156.7	159.5	8.8	7.9	7.6	136.2	147.0	158.2
11. Business Transfers	31.5	32.2	32.9	33.6	34.3	35.0	35.8	36.5	37.3	38.1	9.6	8.9	8.8	31.9	34.7	37.7
12. Interest Transfers	196.8	198.5	199.6	200.8	202.7	205.8	208.5	211.7	214.9	218.2	10.5	3.8	5.9	197.0	204.5	216.5
13. Personal Dividends	111.4	113.2	114.3	115.3	116.2	117.2	118.3	119.3	120.4	121.4	9.7	4.2	3.6	112.1	116.8	120.9
Equals:																
14. Personal Income	4400.3	4456.5	4519.9	4607.1	4680.8	4747.7	4824.9	4919.0	5000.3	5066.5	8.8	6.6	6.8	4423.6	4715.1	5033.7
Less:																
15. Personal Tax Payments	652.6	646.6	656.5	674.4	698.0	692.0	701.6	722.9	745.6	743.4	10.1	7.0	7.2	646.0	691.5	741.4
Equals:																
16. Personal Disposable Inc	3747.7	3809.8	3863.4	3932.7	3982.8	4055.7	4123.3	4196.2	4254.7	4323.1	8.6	6.5	6.7	3777.6	4023.6	4292.3
Less:																
17. Personal Consumption	3444.1	3509.5	3553.7	3613.2	3671.3	3733.8	3796.1	3864.8	3935.0	3997.2	7.3	6.7	7.1	3472.2	3703.6	3965.2
18. Other Outlays	102.9	104.4	105.8	106.6	107.5	108.9	110.5	111.6	112.8	114.5	6.0	4.4	5.0	103.9	108.4	113.8
Equals:																
19. Personal Savings	200.7	196.0	203.9	212.9	204.0	213.0	216.7	219.8	206.9	211.4	39.3	5.0	0.8	201.6	211.7	213.3
20. Savings Rate(%, AR)	5.4	5.1	5.3	5.4	5.1	5.3	5.3	5.2	4.9	4.9	28.1	-1.4	-5.7	5.4	5.3	5.0

Table 5.

U. S. Federal Government Activity
for 1989-II and 1989-III with Forecasts for 1989-IV through 1991-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	88/89	89/90	90/91	1989	1990	1991
1. Government Receipts	1053.2	1040.5	1063.1	1100.4	1127.7	1130.6	1144.2	1182.3	1209.3	1208.0	7.8	7.4	7.1	1048.3	1125.7	1205.5
2. Personal Tax & Nontax	465.1	456.6	464.5	478.5	497.0	488.1	494.7	511.7	529.2	522.8	11.0	6.8	6.9	458.3	489.6	523.4
3. Corporate Profits Tax	109.7	99.6	109.2	108.0	110.7	114.2	114.9	119.2	122.7	121.7	-2.3	2.8	8.5	108.9	112.0	121.5
4. Indirect Business Tax	58.2	59.4	60.1	61.0	61.2	63.5	64.1	65.9	66.3	68.0	3.8	6.0	7.6	58.9	62.5	67.2
5. Social Security Contr	420.2	424.9	429.3	452.9	458.8	464.8	470.5	485.5	491.1	495.5	7.9	9.4	6.9	422.2	461.8	493.4
6. Goverrment Expenditures	1198.6	1191.0	1232.8	1264.6	1264.8	1275.3	1306.3	1330.3	1344.1	1356.7	7.4	6.3	6.1	1201.5	1277.8	1355.2
7. Purchases of Goods and Services	406.0	403.1	422.0	430.6	430.1	429.8	442.2	444.2	448.4	449.5	6.9	6.3	4.1	407.5	433.2	451.1
8. Defense	301.3	306.2	310.3	316.9	318.4	319.0	320.4	326.0	328.1	328.7	2.1	4.8	3.0	304.1	318.7	328.2
9. Durables	82.8	84.2	84.8	85.1	85.0	85.8	86.3	85.8	86.0	86.2	-0.4	2.3	0.7	83.6	85.6	86.2
10. Nondurables	11.7	11.7	12.0	12.5	12.5	12.5	12.7	13.0	12.9	13.1	6.0	8.7	4.2	11.6	12.6	13.1
11. Military Payroll	79.0	79.2	80.2	83.1	83.4	83.4	83.1	86.1	86.3	86.5	4.4	4.9	3.6	79.4	83.3	86.3
12. Civilian Payroll	40.4	40.7	41.1	43.3	43.6	43.9	44.1	46.1	46.3	46.4	8.9	7.8	6.0	40.6	43.7	46.4
13. Other Services	81.2	83.6	85.1	85.5	86.7	86.3	87.0	87.7	89.1	89.0	-0.5	4.8	2.9	82.4	86.4	88.9
14. Structures	6.3	6.8	7.1	7.4	7.2	7.1	7.2	7.3	7.5	7.5	-6.0	9.1	3.5	6.6	7.2	7.5
15. Nondefense	104.7	96.8	111.7	113.7	111.7	110.8	121.8	118.2	120.3	120.8	24.2	10.7	7.4	103.4	114.5	123.0
16. Durables	5.3	5.2	5.6	5.6	5.8	5.6	5.9	6.0	6.2	6.1	15.1	7.5	8.0	5.3	5.7	6.2
17. Nondurables	5.9	-2.3	10.1	9.7	5.2	4.7	13.2	7.6	6.4	7.4				4.4	8.2	10.5
18. CCC Inventory Chg	-1.0	-9.2	3.5	1.6	-2.8	-3.3	4.7	-1.7	-2.6	-1.5				-2.6	0.1	-0.9
19. Other Nondurables	6.9	6.9	7.2	8.1	8.0	8.0	8.5	9.3	9.0	8.9	-3.4	14.0	12.4	7.2	8.2	9.2
20. Compensation	49.7	50.1	50.4	52.5	53.0	53.4	53.9	56.2	56.7	57.1	8.1	6.7	7.0	49.9	53.2	56.9
21. Other Services	37.0	36.8	37.6	38.0	40.1	39.6	41.3	41.1	43.5	42.7	8.4	8.1	8.1	36.8	39.8	43.0
22. Structures	6.9	7.0	7.4	7.9	7.6	7.5	7.5	7.3	7.5	7.5	1.5	9.7	-2.3	7.0	7.6	7.5
23. Transfer Payments	466.9	473.0	483.3	499.2	503.5	509.0	519.0	531.2	536.7	542.1	7.5	7.8	6.5	470.9	507.7	540.7
24. Grants-In-Aid to State and Local Govt	118.4	119.7	123.4	129.2	125.6	125.5	127.2	131.1	132.5	133.2	7.8	5.7	4.8	120.1	126.9	133.0
25. Net Interest Paid	172.0	173.3	173.7	173.4	175.0	178.4	181.4	185.5	189.1	193.0	13.3	3.2	7.9	171.5	177.1	191.0
26. Deficit of Government Enterprises	35.3	22.0	30.4	32.2	30.6	32.6	36.5	38.3	37.4	38.9	-12.3	4.5	19.9	31.6	33.0	39.5
27. Federal Surplus	-145.4	-150.5	-169.7	-164.2	-137.1	-144.7	-162.1	-148.0	-134.8	-148.7				-153.3	-152.0	-149.5
28. State and Local Surplus	47.5	44.7	42.7	46.6	45.7	46.0	47.6	53.5	57.0	57.8				45.9	46.5	57.0
29. Total Government Surplus	-97.9	-105.8	-127.0	-117.6	-91.4	-98.7	-114.5	-94.5	-77.8	-90.9				-107.4	-105.6	-92.5
30. Federal Debt held by Individuals	1903.7	1949.1	1986.0	2034.5	2034.7	2074.7	2102.8	2148.6	2150.3	2186.4	7.0	6.6	5.5	1934.8	2061.7	2175.3

Table 6.

Selected Economic Variables in the U. S. Economy
for 1989-II and 1989-III with Forecasts for 1989-IV through 1991-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	88/89	89/90	90/91	1989	1990	1991
PRICES																
1. Consumer Price Index	123.7	124.7	126.0	127.3	128.9	130.5	131.9	133.4	135.4	137.3	4.9	4.6	5.1	124.0	129.7	136.2
2. % Change (AR)	6.7	3.3	4.3	4.2	5.1	5.1	4.4	4.6	6.1	5.7						
3. PPI - Indust. Commodities	112.1	111.8	113.2	114.5	115.8	146.6	117.4	118.6	120.6	121.7	5.2	3.8	4.1	111.8	116.1	120.9
4. % Change (AR)	7.7	-1.1	5.0	4.7	4.6	2.8	2.8	4.2	6.9	3.7						
5. PPI - Finished Goods	113.8	113.6	114.9	115.9	117.1	118.3	119.4	120.4	121.6	122.9	5.1	3.6	3.9	113.6	117.7	122.2
6. % Change (AR)	6.7	-0.6	4.7	3.5	4.2	4.2	3.8	3.4	4.0	4.3						
CORPORATE ECONOMY																
7. After Tax Profits	161.1	141.3	150.0	152.6	155.3	157.6	153.3	161.8	165.4	162.2	-7.3	-1.2	4.6	156.5	154.7	161.8
8. Inventory Profits	-20.5	-4.7	-18.7	-24.5	-20.8	-25.6	-16.3	-24.3	-27.7	-24.4				-20.6	-21.8	-23.0
9. Genuine Profits	172.9	163.2	152.4	150.1	154.6	149.7	151.9	150.3	147.3	147.1	-13.4	-8.2	-2.0	165.1	151.6	148.5
10. Dow-Jones Index - Mean Closing	2427.8	2646.2	2573.2	2489.3	2661.5	2447.3	2402.6	2362.1	2278.3	2403.5	20.4	0.8	-6.0	2480.3	2500.2	2350.9
11. New York Composite Index - Mean Closing	175.15	180.37	181.66	178.49	185.66	178.45	177.19	176.29	173.42	177.95	16.8	2.7	-2.1	175.13	179.95	176.09
FINANCIAL																
12. Monetary Base	289.2	291.1	294.6	299.8	305.1	309.4	313.6	317.6	321.6	325.8	4.3	5.5	5.5	290.9	307.0	323.8
13. Checkable Deposits	559.0	560.5	570.4	574.2	583.7	592.3	600.5	606.2	611.7	620.4	-0.9	3.9	5.0	565.5	587.7	616.8
14. M1	775.6	778.9	791.6	799.0	811.9	824.2	836.1	845.8	855.5	868.3	0.9	4.4	5.5	783.2	817.8	862.6
15. Velocity of M1	6.667	6.737	6.726	6.757	6.770	6.773	6.793	6.826	6.863	6.842	6.4	1.9	1.1	6.647	6.773	6.849
16. M2	3080.3	3136.8	3193.4	3238.0	3295.5	3349.4	3402.5	3453.2	3500.6	3559.4	3.7	6.4	6.4	3120.4	3321.4	3532.3
17. Velocity of M2	1.679	1.673	1.667	1.667	1.668	1.667	1.669	1.672	1.677	1.669	3.6	-0.0	0.3	1.668	1.668	1.673
INTEREST RATES																
18. Federal Funds Rate	9.73	9.08	8.54	8.11	7.93	8.23	8.96	9.43	9.62	9.67	21.5	-9.7	18.1	9.20	8.31	9.81
19. Prime Rate	11.36	10.66	10.38	9.63	9.50	9.92	10.38	10.85	11.17	11.50	16.4	-9.1	15.5	10.84	9.86	11.39
20. 3 Month Treasury Bill	8.41	7.85	7.56	7.36	6.69	6.84	7.43	7.68	8.02	8.03	21.3	-12.5	14.6	8.09	7.08	8.11
21. 6 Month Treasury Bill	8.33	7.69	7.66	7.34	6.88	7.29	7.88	8.27	8.47	8.35	16.7	-8.9	16.1	8.07	7.35	8.53
22. 1 Year Treasury Bond	8.93	8.10	7.98	7.83	7.71	7.96	8.16	8.28	8.57	8.50	12.0	-7.7	7.6	8.57	7.92	8.52
23. 7 Year Treasury Bond	8.81	8.09	7.93	7.86	7.74	8.04	8.39	8.55	8.46	8.42	-2.1	-6.1	6.8	8.53	8.01	8.55
24. 30 Year Treasury Bond	8.71	8.12	7.89	7.74	7.79	8.11	8.54	8.72	8.73	8.66	-5.8	-4.7	9.5	8.44	8.05	8.81
25. Seasoned AAA Corps	9.49	8.97	8.85	8.69	8.93	9.23	9.42	9.63	9.69	9.57	-4.8	-1.9	6.6	9.25	9.07	9.66
26. FHA Mortgage Rate	10.67	10.00	9.82	9.67	9.96	10.17	10.56	10.89	11.02	10.84	-0.1	-2.3	9.0	10.32	10.09	11.00
ADDITIONAL INDICATORS																
27. Housing Starts	1352	1338	1343	1371	1396	1430	1436	1402	1354	1335	-7.2	1.5	-3.6	1388	1408	1358
28. Single Family Starts	993	996	998	1015	1027	1044	1037	1016	995	972	-6.8	1.6	-4.2	1014	1031	987
29. Multiple Family Starts	360	342	345	356	369	386	399	386	359	363	-8.1	1.0	-1.8	374	378	371
30. Unit Auto Sales	10.27	10.77	9.70	9.96	10.12	10.43	10.37	10.53	10.60	10.43	-4.9	1.0	2.6	10.12	10.22	10.48
31. Industry Production Indx	141.6	142.2	142.1	141.7	143.1	144.2	145.1	146.0	146.8	145.3	3.2	1.3	1.8	141.6	143.5	146.1
32. Capacity Utilization	83.9	83.7	83.1	82.7	83.1	83.3	83.4	83.5	83.5	83.0	0.5	-0.7	0.2	83.7	83.1	83.3

Table 7.

U. S. Foreign Trade Accounts
for 1989-II and 1989-III with Forecasts for 1989-IV through 1991-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	88/89	89/90	90/91	1989	1990	1991
MERCHANDISE TRADE (Not Seasonally Adjusted, Annual Rates)																
1. Merchandise Exports	373888	348700	371605	379030	394715	377740	399255	406040	426860	414825	12.7	7.2	8.7	361544	387685	421498
2. Food & Live Animals	29892	29196	29130	29950	30160	30150	30470	31830	32240	32250	12.2	1.9	6.8	29626	30183	32228
3. Beverages & Tobacco	5066	5020	5695	6020	5890	5920	6540	6940	6860	6950	16.3	15.2	16.7	5290	6093	7107
4. Crude Materials	26857	25346	25170	27140	26950	25830	27220	29260	29110	29060	4.9	1.8	10.2	26320	26785	29513
5. Mineral Fuels	10064	9361	10110	9620	10240	10150	10820	10160	10920	11100	16.3	7.2	7.8	9518	10208	11003
6. Animal & Vegetable Oil	1216	1400	1450	1420	1405	1360	1385	1390	1420	1445	-6.5	2.5	2.8	1359	1393	1432
7. Chemicals	40398	37073	37000	38250	40160	40760	41250	42460	44130	44640	15.4	7.6	10.0	37271	40105	44102
8. Manufactured Goods	27972	27059	28450	30160	31970	31210	31980	33210	35050	35000	19.7	14.6	11.0	27342	31330	34781
9. Machinery, Trnspt. Eq.	152681	142659	153620	150430	157560	148830	159960	156630	165410	157680	9.0	4.6	5.3	147363	154195	162298
10. Misc. Manufacturing	33472	30635	32850	36430	38860	37150	38460	41530	47100	46000	29.7	18.6	20.8	31801	37725	45563
11. Commodities, n.e.c.	32066	27983	33280	34660	36140	31720	35580	36820	38270	34650	14.0	9.1	7.6	31651	34525	37152
12. Foreign Merchandise	14205	12968	14850	14950	15380	14660	15590	15810	16350	16050	12.1	8.1	7.8	14004	15145	16320
13. Merchandise Imports	474292	480521	499481	495094	507900	508252	528405	524602	539126	540575	8.1	6.9	-7.3	476943	509913	472871
14. Food & Live Animals	20608	20438	21530	23020	22120	21860	22410	23620	23140	22970	6.0	5.8	4.3	21132	22353	23319
15. Beverages & Tobacco	4110	4192	4760	4120	4310	4380	5010	4360	4510	4550	2.7	4.8	4.5	4250	4455	4656
16. Crude Materials	15768	15424	15550	16630	17160	16970	17100	17920	18160	18010	16.6	8.6	6.5	15623	16965	18059
17. Mineral Fuels	56157	55565	55026	56614	57015	58232	62075	65947	67366	67895	29.2	10.2	16.9	53095	58484	68396
18. Animal & Vegetable Oil	723	745	760	750	745	710	720	725	740	750	-13.7	-0.2	1.7	733	731	744
19. Chemicals	20874	20279	20750	22150	21870	21000	21700	23020	22760	22120	5.4	3.5	4.7	20942	21680	22689
20. Manufactured Goods	63062	63859	63800	65100	65000	65620	66100	67640	67550	68130	2.7	3.4	3.9	63328	65455	67987
21. Machinery, Trnspt. Eq.	210940	197845	216215	208630	219120	208860	225450	216240	227310	218960	4.8	4.3	4.3	206585	215515	224716
22. Misc. Manufacturing	68335	88208	86690	84230	86150	95840	92820	90460	92170	101430	10.0	15.8	6.5	77509	89760	95573
23. Commodities, n.e.c.	13716	13967	14400	13850	14410	14780	15020	14670	15420	15760	8.5	5.6	6.6	13747	14515	15466
FOREIGN TRANSACTIONS - GNP ACCOUNTS (Seasonally Adjusted, Annual Rates)																
24. Total Exports	626.1	618.6	630.9	642.8	654.9	661.5	674.6	692.5	712.1	723.5	13.3	6.2	8.8	620.3	658.5	716.5
25. Mdse Exports	372.1	368.1	376.6	384.0	391.7	392.7	399.3	411.0	424.9	429.8	14.6	6.2	8.6	368.9	391.9	425.7
26. Factor Income	136.2	129.9	131.6	134.3	136.4	139.1	143.3	147.3	150.6	154.5	13.4	4.4	10.6	132.4	138.3	152.9
27. Other Services	117.8	120.5	122.7	124.5	126.8	129.7	132.0	134.2	136.6	139.2	9.2	7.8	7.5	119.0	128.3	137.9
28. Total Imports	676.6	686.3	699.7	715.3	720.9	730.2	750.5	767.3	775.3	788.3	9.5	7.2	7.7	680.6	729.2	785.3
29. Mdse Imports	480.0	486.9	499.5	510.1	512.9	515.3	528.4	539.6	544.1	550.6	8.4	6.7	6.4	484.1	516.7	549.7
30. Factor Income	105.2	104.6	103.2	105.9	109.3	113.8	118.6	121.9	125.6	129.4	22.9	9.1	14.3	102.6	111.9	127.9
31. Other Services	91.4	94.8	97.0	99.3	98.7	101.1	103.5	105.8	105.6	108.3	5.7	7.2	6.9	93.9	100.7	107.6
32. Net Transfer Payments	12.5	14.1	20.1	14.9	14.3	15.6	21.8	15.3	14.8	15.7	2.5	10.1	1.7	15.1	16.7	16.9
33. Government Interest	34.4	34.0	34.3	34.0	34.9	36.2	37.7	39.2	40.8	42.2	16.3	5.6	16.4	33.8	35.7	41.5
34. Net Foreign Investment	-97.5	-115.9	-123.2	-121.4	-115.2	-120.5	-135.4	-129.3	-118.8	-122.7	----	----	----	-109.2	-123.1	-127.2
35. Trade Weighted Value of Dollar (3/73 = 100)	100.2	100.5	99.7	96.6	95.2	93.8	91.1	90.5	91.6	90.8	6.8	-5.0	-4.1	99.1	94.2	90.3

Table 8.

Personal Consumption Expenditure Implicit Price Deflators
for 1989-II and 1989-III with Forecasts for 1989-IV through 1991-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	88/89	89/90	90/91	1989	1990	1991
1. Durable Goods	110.8	111.5	112.0	112.5	112.9	113.7	114.3	114.9	115.7	116.8	1.2	1.8	2.5	111.4	113.4	116.2
2. Percent Change(AR)	-1.4	2.2	2.0	1.7	1.5	2.7	2.4	1.8	3.0	3.8						
3. Automobiles	120.3	119.8	120.7	121.2	121.4	121.8	122.6	123.4	124.4	125.6	1.8	1.3	2.6	120.2	121.7	125.0
4. Percent Change(AR)	0.2	-1.6	3.0	1.6	0.7	1.3	2.7	2.6	3.2	4.0						
5. Furniture	97.2	97.9	98.4	98.3	98.5	99.1	99.3	99.1	99.4	100.1	-0.3	0.8	0.9	98.0	98.8	99.7
6. Percent Change(AR)	-5.0	3.0	2.1	-0.4	0.7	2.5	0.9	-0.9	1.1	2.9						
7. Other Durables	121.9	122.7	124.1	125.7	127.0	128.3	129.9	131.3	133.0	134.8	4.4	4.3	4.8	122.4	127.7	133.9
8. Percent Change(AR)	3.8	2.7	4.7	5.3	3.9	4.4	4.9	4.7	5.2	5.5						
9. Nondurables	123.3	122.9	124.1	125.4	126.9	127.9	129.4	130.8	133.1	134.5	5.4	3.9	4.9	122.6	127.4	133.6
10. Percent Change(AR)	11.3	-1.3	4.1	4.1	5.0	3.0	4.8	4.4	7.3	4.2						
11. Food	128.3	129.1	130.3	131.7	133.0	134.3	135.8	137.3	138.8	140.3	5.6	4.1	4.4	128.4	133.7	139.6
12. Percent Change(AR)	7.6	2.4	3.7	4.4	4.0	3.9	4.5	4.6	4.4	4.4						
13. Apparel	120.0	116.6	118.1	118.6	120.0	119.2	120.6	121.5	126.2	126.3	2.1	1.2	4.9	118.2	119.6	125.4
14. Percent Change(AR)	6.2	-10.6	5.1	1.8	4.9	-2.6	4.8	2.8	16.6	0.2						
15. Gasoline and Oil	92.7	88.2	89.0	89.8	92.3	93.7	94.9	96.1	98.5	100.8	10.6	6.0	7.2	87.4	92.7	99.4
16. Percent Change(AR)	82.3	-18.1	3.6	3.5	11.6	6.6	5.1	5.0	10.7	9.6						
17. Fuel Oil	80.3	80.2	81.3	83.5	85.1	85.3	86.2	88.4	90.2	91.1	3.6	6.3	6.3	80.0	85.0	90.4
18. Percent Change(AR)	13.0	-0.4	5.6	10.8	8.1	1.1	3.9	10.7	8.5	3.8						
19. Other Nondurables	137.1	138.8	140.2	142.1	143.7	145.4	147.2	148.9	150.7	152.7	5.7	5.0	4.9	137.8	144.6	151.7
20. Percent Change(AR)	6.0	5.0	4.3	5.5	4.6	4.8	5.1	4.7	4.8	5.4						
21. Services	140.4	141.8	143.4	145.1	146.9	148.6	150.5	152.6	154.6	156.6	4.6	4.7	5.3	141.2	147.8	155.6
22. Percent Change(AR)	4.0	4.2	4.5	4.9	5.0	4.6	5.2	5.6	5.4	5.3						
23. Housing	142.0	144.2	146.1	147.9	149.9	151.8	153.8	155.9	157.9	160.1	4.6	5.3	5.4	143.3	150.9	159.0
24. Percent Change(AR)	3.5	6.3	5.5	5.0	5.5	5.2	5.4	5.5	5.3	5.6						
25. Electricity and Gas	116.2	115.5	116.8	117.8	118.7	119.1	120.7	122.1	123.1	124.1	2.7	2.5	4.0	116.1	119.1	123.8
26. Percent Change(AR)	0.8	-2.4	4.7	3.4	2.9	1.3	5.5	4.8	3.3	3.4						
27. Other Household Opns	129.9	130.3	130.8	131.4	132.2	132.9	133.6	134.6	136.4	137.2	1.9	1.8	3.0	130.3	132.6	136.5
28. Percent Change(AR)	-0.2	1.3	1.3	2.1	2.4	1.9	2.4	2.8	5.4	2.6						
29. Transportation	129.4	128.2	129.1	130.8	132.3	134.1	136.0	138.2	140.5	142.4	0.8	3.4	6.1	128.9	133.3	141.4
30. Percent Change(AR)	0.5	-3.5	2.7	5.5	4.8	5.4	6.0	6.7	6.6	5.7						
31. Medical Care	151.9	154.1	156.3	158.6	161.0	163.5	166.2	169.2	172.1	174.9	6.8	6.1	6.9	153.0	162.4	173.5
32. Percent Change(AR)	6.2	6.0	5.8	6.1	6.2	6.3	6.8	7.4	7.0	6.7						
33. Other Services	140.3	141.6	143.0	144.5	146.0	147.3	148.8	150.4	151.9	153.6	3.8	4.1	4.2	140.9	146.7	152.8
34. Percent Change(AR)	4.6	3.7	4.0	4.2	4.2	3.6	4.1	4.3	4.1	4.6						

Table 9.

Gross National Product Implicit Price Deflators
for 1989-II and 1989-III with Forecasts for 1989-IV through 1991-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	88/89	89/90	90/91	1989	1990	1991
1. Gross National Product	125.9	126.8	128.2	129.7	130.9	132.2	133.7	135.2	136.7	138.3	4.2	4.2	4.5	126.4	131.6	137.5
2. Percent Change(AR)	4.6	2.9	4.5	4.8	3.8	4.0	4.6	4.6	4.5	4.8						
3. Personal Consumption	129.8	130.4	131.8	133.2	134.7	136.0	137.6	139.2	141.1	142.8	4.4	4.1	4.8	130.0	135.4	141.9
4. Percent Change(AR)	5.7	1.9	4.4	4.3	4.6	3.9	4.8	4.7	5.6	4.9						
5. Consumer Price Index	123.7	124.7	126.0	127.3	128.9	130.5	131.9	133.4	135.4	137.3	4.9	4.5	5.1	124.0	129.7	136.2
6. Percent Change(AR)	6.7	3.3	4.2	4.2	5.1	5.1	4.4	4.6	6.1	5.7						
7. Private Domestic Invest	107.7	107.6	108.3	109.4	109.9	110.9	112.0	112.9	113.4	114.2	2.6	2.8	3.1	107.6	110.5	114.0
8. Percent Change(AR)	3.6	-0.3	2.6	4.2	1.8	3.7	3.9	3.5	1.8	2.7						
9. Structures	120.6	121.4	122.4	123.8	125.0	126.3	127.9	129.5	130.9	132.4	5.3	3.9	4.7	121.0	125.8	131.7
10. Percent Change(AR)	3.7	2.7	2.0	4.7	3.9	4.2	5.2	5.1	4.4	4.7						
11. Producer's Durables	94.1	94.4	95.0	95.5	95.9	96.3	96.8	97.3	97.8	98.3	1.2	1.7	2.0	94.5	96.1	98.1
12. Percent Change(AR)	-1.3	1.3	2.6	2.1	1.7	1.7	2.1	2.1	2.1	2.1						
13. Residential Structures	124.2	125.4	126.7	128.2	129.4	130.8	132.3	134.0	135.5	137.1	4.1	4.5	4.7	124.6	130.2	136.3
14. Percent Change(AR)	7.1	3.9	4.2	4.8	3.8	4.4	4.7	5.2	4.6	4.8						
15. Exports	106.6	105.3	104.7	105.1	105.8	106.5	107.7	109.0	110.3	111.6	2.4	0.5	4.4	105.7	106.3	110.9
16. Percent Change(AR)	1.1	-4.8	-2.3	1.5	2.7	2.7	4.6	4.9	4.9	4.8						
17. Imports	105.9	103.7	103.2	103.8	104.3	105.1	106.3	107.6	109.2	110.5	1.9	0.3	4.7	104.6	104.9	109.8
18. Percent Change(AR)	1.1	-8.1	-1.9	2.3	1.9	3.1	4.6	5.0	6.1	4.8						
19. Federal	118.2	120.0	122.0	123.7	124.4	125.7	127.2	129.7	130.3	131.8	3.3	4.6	4.8	119.8	125.3	131.3
20. Percent Change(AR)	-2.3	6.2	6.8	5.7	2.3	4.2	4.9	8.1	1.9	4.7						
21. Federal Purchases	109.1	111.6	114.8	114.4	114.9	116.6	119.0	119.5	120.2	122.2	2.3	4.3	4.7	111.5	116.2	121.6
22. Percent Change(AR)	-4.4	9.3	12.3	-1.5	1.8	6.1	8.4	1.7	2.3	6.9						
23. Federal Value Added	133.7	133.9	134.2	139.8	140.5	141.0	141.2	146.6	147.2	147.6	5.1	5.2	4.7	133.7	140.6	147.3
24. Percent Change(AR)	1.8	0.6	0.9	17.8	2.0	1.4	0.6	16.2	1.6	1.1						
25. State & Local	134.4	135.7	137.0	138.6	140.4	142.2	143.8	145.7	147.4	149.2	4.8	4.6	5.0	135.0	141.3	148.3
26. Percent Change(AR)	4.6	3.9	3.9	4.8	5.3	5.2	4.6	5.4	4.7	5.0						
27. State/Local Purchases	122.4	122.9	124.0	125.3	126.8	128.1	129.6	131.0	132.6	134.1	4.4	3.9	4.6	122.6	127.5	133.3
28. Percent Change(AR)	3.7	1.9	3.5	4.3	4.7	4.4	4.7	4.3	4.8	4.7						
29. State/Local Value Added	144.4	146.3	148.0	150.1	152.0	154.1	155.9	158.1	160.0	162.1	5.3	5.3	5.2	145.3	153.0	161.0
30. Percent Change(AR)	5.1	5.4	4.7	5.8	5.2	5.6	4.8	5.8	4.9	5.4						

Table 10.

Details of Private Consumption in the U. S.
for 1989-II and 1989-III with Forecasts for 1989-IV through 1991-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	88/89	89/90	90/91	1989	1990	1991
Current Dollars																
1. Durable Goods	471.0	490.4	479.2	485.5	490.8	499.0	501.8	509.5	516.6	518.7	4.7	3.7	4.5	476.8	494.3	516.6
2. Autos, Trucks & Parts	212.9	230.0	214.7	220.3	224.3	231.5	231.1	236.8	241.3	241.3	2.7	4.4	5.9	217.3	226.8	240.1
3. Furniture	173.5	173.4	175.0	175.3	175.6	176.0	177.2	178.0	179.0	180.2	7.1	1.5	2.1	173.5	176.0	179.7
4. Other	84.6	87.0	89.5	89.9	90.9	91.5	93.5	94.7	96.3	97.2	5.3	6.4	5.9	85.9	91.5	96.9
5. Nondurable Goods	1121.5	1128.9	1144.6	1161.3	1175.8	1192.1	1209.8	1228.2	1248.7	1265.4	6.7	5.5	6.1	1123.3	1184.8	1256.6
6. Food	592.2	598.2	605.6	614.2	621.9	630.1	639.3	648.1	656.7	665.0	6.4	5.1	5.5	595.8	626.4	661.1
7. Clothing & Shoes	198.9	201.2	205.0	207.2	208.0	210.2	212.3	216.1	221.9	223.4	7.1	4.7	5.9	200.0	209.4	221.8
8. Gasoline & Oil	89.5	84.6	84.9	85.9	88.2	89.9	91.4	92.8	94.7	96.8	9.7	5.5	7.7	84.2	88.9	95.7
9. Fuel Oil & Coal	19.6	19.9	20.5	21.2	21.7	22.1	22.4	22.8	23.0	23.4	0.9	11.1	6.3	19.7	21.9	23.2
10. Other	221.4	225.1	228.6	232.8	236.0	239.8	244.4	248.4	252.4	256.8	6.7	6.5	7.0	223.6	238.3	254.8
11. Services	1851.7	1890.1	1929.9	1966.4	2004.7	2042.7	2084.5	2127.1	2169.7	2213.1	8.4	8.1	8.3	1872.1	2024.6	2192.1
12. Housing	527.7	537.9	547.0	555.8	565.6	575.2	585.4	596.0	606.2	617.3	6.4	7.0	7.3	533.2	570.5	611.9
13. Utilities	94.6	92.3	97.1	97.8	99.1	100.5	102.7	104.4	106.0	107.5	0.8	6.0	6.9	94.4	100.0	106.9
14. Other	107.7	109.1	110.1	111.2	112.4	113.6	115.2	116.8	118.9	120.2	4.5	4.1	5.6	108.6	113.1	119.4
15. Transportation	125.6	126.8	128.8	132.1	135.1	138.1	141.2	144.6	147.9	151.1	4.7	8.1	9.4	126.4	136.6	149.5
16. Medical Care	445.1	458.3	471.2	483.6	496.4	509.3	522.9	537.7	552.4	566.3	13.4	11.4	11.2	451.7	503.1	559.5
17. Other	551.0	565.7	575.7	585.9	596.1	606.0	617.1	627.6	638.3	650.7	8.9	7.8	7.2	557.8	601.3	644.8
Constant Dollars																
18. Durable Goods	424.9	440.0	427.8	431.6	434.7	439.0	438.9	443.6	446.5	444.2	3.5	1.9	2.0	428.0	436.1	444.6
19. Autos, Trucks & Parts	177.0	192.0	177.9	181.8	184.8	190.1	188.5	191.9	194.0	192.1	0.9	3.1	3.1	180.8	186.3	192.1
20. Furniture	178.5	177.1	177.8	178.3	178.3	177.6	178.4	179.6	180.1	180.0	7.4	0.6	1.1	177.1	178.2	180.1
21. Other	69.4	70.9	72.1	71.5	71.6	71.3	72.0	72.1	72.4	72.1	0.9	2.0	1.1	70.2	71.6	72.4
22. Nondurable Goods	909.7	918.6	922.0	926.0	926.2	932.2	935.1	939.1	938.0	940.8	1.3	1.5	1.1	916.3	929.9	940.4
23. Food	461.4	463.3	464.8	466.4	467.6	469.2	470.8	472.0	473.1	474.0	0.8	1.0	1.1	463.9	468.5	473.7
24. Clothing & Shoes	165.8	172.5	173.6	174.7	173.3	176.3	176.0	177.9	175.8	176.9	4.9	3.5	1.0	169.2	175.1	176.8
25. Gasoline & Oil	96.5	95.9	95.4	95.7	95.6	95.9	96.3	96.6	96.1	96.0	-0.8	-0.5	0.4	96.4	95.9	96.3
26. Fuel Oil & Coal	24.4	24.8	25.2	25.4	25.5	25.9	26.0	25.8	25.5	25.7	-2.6	4.5	-0.0	24.6	25.7	25.7
27. Other	161.5	162.2	163.0	163.8	164.2	164.9	166.0	166.8	167.5	168.2	1.0	1.5	2.0	162.3	164.7	168.0
28. Services	1319.0	1332.5	1345.6	1354.8	1364.5	1374.7	1385.0	1394.3	1403.7	1413.3	3.6	3.3	2.9	1326.0	1369.8	1408.8
29. Housing	371.7	373.1	374.4	375.8	377.3	378.9	380.6	382.3	383.9	385.6	1.7	1.6	1.8	372.2	378.2	384.8
30. Utilities	81.4	79.9	83.1	83.0	83.5	84.4	85.1	85.5	86.1	86.6	-1.8	3.4	2.8	81.3	84.0	86.4
31. Other	82.9	83.7	84.2	84.6	85.0	85.5	86.2	86.8	87.2	87.6	2.5	2.3	2.5	83.4	85.3	87.5
32. Transportation	97.1	98.9	99.8	101.0	102.1	103.0	103.8	104.6	105.3	106.1	3.8	4.5	3.2	98.0	102.5	105.7
33. Medical Care	293.1	297.4	301.5	304.9	308.3	311.5	314.6	317.8	321.0	323.8	6.1	4.9	4.1	295.3	309.8	322.4
34. Other	392.7	399.5	402.6	405.5	408.3	411.4	414.7	417.3	420.2	423.6	4.9	3.6	2.9	395.8	410.0	422.0

Table 11.

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1989

Productivity and Employment in the U. S. Economy
for 1989-II and 1989-III with Forecasts for 1989-IV through 1991-III

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	88/89	89/90	90/91	1989	1990	1991
PRODUCTIVITY																
1. Private Domestic Wage Component - %Chg(AR)	5.5	5.5	4.7	6.5	5.1	5.1	5.3	5.7	5.3	5.3	5.4	5.4	5.3			
2. Private Productivity % Change(AR)	0.5	1.4	-0.2	-0.9	1.3	-0.0	0.7	0.3	0.9	-0.6	0.4	0.2	0.4			
3. Implicit Unit Labor Cost % Change(AR)	4.9	4.0	4.9	7.5	3.7	5.2	4.6	5.3	4.3	5.9	4.9	5.2	4.9			
4. Private Domestic Price Deflator - %Chg(AR)	4.5	3.0	4.4	4.1	3.8	4.0	4.8	4.4	4.5	4.9	4.1	4.0	4.5			
EMPLOYMENT																
5. Civilian Employment	117290	117504	117835	118394	118973	119626	120153	120656	121152	121574	2.1	1.6	1.7	117382	119287	121373
6. Private Employment	90661	91093	91421	91999	92590	93151	93641	94088	94561	94872	3.0	2.2	2.0	90837	92845	94723
7. Manufacturing Employment	19663	19615	19509	19526	19568	19609	19617	19633	19639	19637	1.1	-0.2	0.3	19612	19580	19639
8. Durable Manufacturing	11587	11524	11403	11438	11472	11502	11508	11522	11529	11530	0.8	-0.4	0.4	11529	11480	11529
9. Nondurable Mfg	8076	8091	8106	8088	8096	8107	8109	8111	8110	8107	1.4	0.2	0.1	8083	8100	8109
10. Mining	716	720	735	746	750	755	762	767	771	775	-0.5	4.9	2.7	718	753	774
11. Contract Construction	5282	5315	5343	5407	5441	5476	5497	5512	5487	5463	3.5	2.9	0.6	5301	5455	5486
12. Transport & Communication	5699	5693	5776	5797	5820	5832	5862	5881	5901	5891	2.9	2.1	1.2	5708	5828	5899
13. Transportation	3484	3538	3591	3586	3601	3609	3635	3651	3668	3656	5.5	2.6	1.6	3515	3608	3664
14. Communication	2216	2154	2185	2211	2219	2223	2227	2230	2233	2235	-1.0	1.3	0.6	2192	2220	2234
15. Trade	25745	25861	25978	26124	26249	26375	26504	26643	26767	26867	2.6	2.0	1.9	25802	26313	26819
16. Retail Trade	19526	19610	19695	19815	19911	20014	20113	20224	20332	20412	2.4	2.0	2.0	19571	19963	20370
17. General Merchandise	2492	2484	2473	2486	2495	2506	2514	2522	2530	2537	0.9	0.7	1.3	2482	2500	2534
18. Food	3247	3286	3325	3367	3398	3416	3435	3457	3478	3496	5.5	4.2	2.4	3267	3404	3487
19. Automobiles	2158	2154	2172	2180	2187	2193	2199	2207	2215	2226	3.3	1.5	1.4	2158	2190	2220
20. Eating	6348	6384	6419	6459	6483	6528	6562	6589	6618	6647	1.4	2.2	1.9	6369	6508	6634
21. Other	5281	5302	5306	5323	5348	5371	5403	5449	5491	5506	2.2	1.3	2.5	5293	5361	5496
22. Wholesale Trade	6219	6251	6283	6309	6338	6361	6391	6419	6435	6455	3.4	1.9	1.6	6231	6350	6449
23. Durable	3685	3706	3723	3740	3758	3773	3792	3811	3825	3836	3.7	2.0	1.8	3693	3766	3832
24. Nondurable	2535	2545	2560	2569	2580	2588	2599	2608	2610	2619	2.9	1.8	1.3	2539	2584	2617
25. Finance, Insurance and Real Estate	6791	6831	6859	6892	6929	6963	7002	7037	7069	7100	2.0	2.0	2.0	6811	6947	7086
26. Services	26764	27057	27291	27507	27833	28141	28397	28615	28927	29139	5.0	4.0	3.8	26884	27970	29021
27. Government	17679	17802	18022	18086	18152	18206	18286	18330	18371	18421	2.3	2.3	1.2	17770	18183	18406
28. Federal	2992	2998	3007	3019	3030	3037	3046	3050	3052	3057	0.8	1.3	0.8	2994	3033	3056
29. State & Local	14687	14804	15015	15067	15122	15169	15240	15280	15319	15364	2.6	2.5	1.3	14775	15150	15350
30. Total Payroll	108339	108895	109513	110085	110742	111357	111927	112418	112932	113293	2.9	2.2	1.9	108607	111028	113129
31. Unemployment Rate	5.3	5.2	5.3	5.3	5.3	5.2	5.2	5.2	5.3	5.3	-4.4	0.2	0.5	5.2	5.3	5.3

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FORECAST OF THE NATION

1990 I-1991 VI

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GEORGIA STATE UNIVERSITY
COLLEGE OF BUSINESS ADMINISTRATION

February 1990

Dr. Donald Ratajczak, Director

ECONOMIC FORECASTING CENTER

AUTO ADJUSTMENTS ARE ENDING WITH NO RECESSION IN SIGHT

Dr. Donald Ratajczak
Director
Economic Forecasting Center

SUMMARY

Economic activity currently is weak. The 0.5% growth in GNP during the fourth quarter was only partially explained by special events such as the hurricane, earthquake, and cold winter weather. Consumer spending fell after inflation even though cold weather added utility consumption. The trade deficit also grew as export growth continued to slow. Rising auto inventories during a fall sales slump assure further weakness as autos and auto related industries modify production early in 1990 to eliminate these excesses. Thus, slow growth is expected early in 1990 as well. A shrinking federal government as defense falls in inflation adjusted terms adds yet another source of weakness to the months and years ahead.

Yet, the long awaited recession is not in sight. Much of the consumer weakness was caused by auto sales shifting because of pricing policies in that industry. The resulting inventory excesses should be eliminated by this spring. Weak car sales to rental companies and the Boeing strike account for most of the weakness in capital spending during the fall. Some rebound now should develop with the price concessions on autos and the end of that strike.

The economy lacks a powerful engine to drive it strongly forward, and the consumer still could become sufficiently upset to plunge the economy into recession. Also, export activity continues to slow, despite a reverse in the dollar's fortunes since September. Clearly, recession abroad would undermine what little forward thrust currently exists.

Despite these possibilities, some strengthening of economic activity soon should develop as consumers snap back from their unexpected heating purchases in the winter and as the auto inventory problem ends. Moreover, the temporary shift in money demand caused by the freeze should be reversed in the spring, bringing declining interest rates with it. This should allow some increase in construction activity during the latter half of 1990.

Unfortunately, inflation is not expected to be quelled. Although the freeze caused inflation to surge this winter, and that will be reversed by spring, wage costs continue to drift upward. Hourly earnings remain slightly above 4%, but rising medical costs and higher social security taxes add more than a percentage point to labor costs. Also, the falling dollar should have modest adverse effects upon some commodity prices. Thus, consumer prices should rise 4.7% this year and 4.6% in 1991. The prime interest rate may reach 9.5% this spring, but should be trending upward this fall. A return to 11% prime rates is likely by the middle of 1991 as the Federal Reserve strives to contain an inflation that otherwise would accelerate.

As the dollar continues falling irregularly during the next two years, trade balances should gradually improve and manufacturing activity once again should rebound. Unfortunately, continued inflation from the Federal Reserve while wage pressures are gradually intensifying will lead to reduced corporate profitability. After-tax corporate profits should fall 7% this year and then rebound only modestly, by 7%, in 1991. A falling dollar and little change in interest rates should not provide as fertile grounds for stock market advances as in 1989. Little change is expected for stock market values during this year, while the

threat of rising inflation and continued weakness in corporate earnings could cause a moderate stock market decline in 1991.

OUTLOOK

Just when inflation appeared to be slowing sharply in the industrial sector, the winter freeze distorted price patterns. Many consumers and distributors had not adequately prepared for the cold winter that developed in December. As a result, a product shortage for fuel oil spilled over into diesel fuel, jet fuel and even gasoline. The increased winter consumption probably raised oil prices by about $2 per barrel more than originally expected. Of course, these increased prices and quantities of oil will further hurt the trade balances, leading to further dollar weakness. Some fruits and vegetables also were damaged.

The immediate impact of this temporary supply shock was a dramatic 68% increase in vegetable prices and some petroleum product prices soaring more than 40% in a single month. The higher costs of energy materials led to cash flow problems for corporations and higher financing requirements for the energy inventories. Thus, prices probably increased nearly 2 percent because of the freeze, although the return of abundant supplies should cut these gains to less than 0.3% for the year. Similarly, the higher borrowing requirements led to rising interest rates that should be reversed when the spring weather lowers the inflation rates.

In addition to adverse trade balances, the freeze also created involuntary consumption. About $15 billion of utilities and heating bills in December were paid for the cold weather. This tended to strengthen consumption for the quarter but actually dampened consumption for the first quarter as people restrain spending to replenish their depleted savings. Thus, the impact from the freeze was higher inflation, higher interest rates, and lower economic activity than otherwise would prevail.

While the freeze was adding to economic woes, the auto industry was suffering the consequences of heavily discounting the old model year and significantly raising prices for new cars. Consumers shifted purchases backward into the 1989 model year and forward into later 1990 when incentives were expected to reappear. Those expectations have been fulfilled with a barrage of incentives in January. Car sales have responded to those incentives. Combined with widespread production cutbacks, the auto industry should regain balance by spring.

Once the auto inventory adjustments are complete, the economy will have few imbalances except for the continuing debt problems and the trade imbalances. However, rising interest rates during the freeze will prevent the housing industry from playing its role as an advance sector in an economic expansion. Housing starts currently are expected to fall slightly this year, as high mortgage rates and excess inventories in the northeast and parts of the south will prevent any growth of activity. The consumer probably will provide modest support for the economy, as savings rates are near 6% and the heavy consumer debt remains manageable when measured in terms of monthly payments to service this debt. Even after the Boeing rebound is absorbed, capital spending should show modest growth during the next two years. Capacity utilization remains at levels where further expansion may be generated. Also, cost cutting measures continue to require more capital appropriations.

Of course, the government could be weaker than currently projected. Defense cutbacks appear to be modest in light of changes in world tension. However, Congress may bicker over what bases to save and never actually establish substantial reductions in defense spending. State and local governments appear to be stressed, but enough gains from government grants, tax receipts and changing tax rates appear to be available to ensure modest growth in that sector. Certainly, a more rapid decline in defense than the real 2% per year projected here would have greater initial weakness than generated. However, such defense cutbacks remain to be seen. Deeper defense cutbacks would generate greater weakness than currently projected. However, such a reduction in government spending also would mean lower interest rate pressures that should soon lead to larger gains in construction than originally generated.

Aside from the reticence of the consumer and the speed of the defense cutback, the other uncertainty is in the trade sector. Some of the lost growth in exports during the fall may have been caused by Boeing. Therefore, some catchup is likely early in 1990. However, export growth has been slowing for more than a year. A strong dollar until last fall appears to be responsible for such activity. Assuming world activity continues to expand more than 3 percent, the dollar's decline since September should begin generating increased export growth by next fall. Such assumed world growth appear reasonable, but the European euphoria over the falling Berlin Wall could be replaced by concern over Eastern European ethnic violence. Moreover, the development of Eastern Europe may not be a factor until after this forecast horizon. Only agricultural implements should rapidly expand there, and that probably will limit our exports of agricultural foodstuffs by 1993.

Also, the deteriorating energy production in this country means further imports of oil products even if prices remain reasonably stable. Because of the winter, imports are expected to grow more than exports in 1990, before a weaker dollar and slow domestic growth finally subdues imports in 1991.

The greatest uncertainty on the income side is associated with rapid deterioration in corporate profitability. Part of this profit weakness is caused by the additional leveraging of corporate finance in recent years. Part also is the result of price restraint caused by a strong dollar despite upward pressures in wage costs. Now that the dollar is declining, inflation could intensify if the Federal Reserve reduces their restraints. Alternatively, corporations may engage in cost cutting to restore profitability. This would lead to weaker employment gains than currently envisioned resulting in slower income and consumption activity. While interest rates and inflation would be less than projected, so will economic activity. Indeed, serious cost cutting could tilt the economy into a mild recession.

Thus far, the corporate sector has shown only modest desires to restrain cost pressures to restore profitability. Employment gains continue to expand faster than anticipated. Thus, the currently anticipated downward drift in corporate profitability and modest expansion of employment appear most likely. Nevertheless, the country will avoid a recession partially because corporate profits are willing to fall as if they are in one.

This erosion of profitability may be tolerated because investors have not seriously penalized stock values for poor near-term performance. Although the market probably peaked the first trading day of the new year, ground has been given grudgingly. The dollar's projected weakness discourages foreign investors. Falling profits lower the value of a corporation. Rising interest rates certainly reduce the market value of any income stream. Economic uncertainty normally reduces values for any prevailing fundamentals. Yet, the stock market gave little ground when all those variables were working against it. Now that interest rates should decline in the next few months and the economic uncertainty should clear somewhat, some stock market gains are likely. Nevertheless, the outlook is not that favorable for corporate earnings. Thus, a sideways market seems to be in store for 1990.

Investors probably can profit from a short-term bond market rally. However, the total returns expected from bonds in 1990 are only about 9% as iittle capital gains is expected. Reductions in foreign interest rates may develop by mid-year leading to some investment opportunities there, especially in German issues, but investors will struggle to find strong gains this year. On the other hand, no serious collapse is expected unless the Japanese elections lead to surprises which undermine that market.

The outlook remains one of muddling through. Inflation does not appear to be easing significantly, but neither is it intensifying. No serious expenditures imbalances are looming that require significant production restraints now that the auto adjustment is nearly complete. Construction will be soft, but it does not need to fall hard from current levels. Defense cutbacks could hurt activity in some areas, but any reductions in government deficits from the defense restraint could lead to lower interest rates and a rebound in interest sensitive parts of the economy, including homebuilding, autos, and appliances. Except on the farm, "bringing the boys home" does not mean economic weakness.

ASSUMPTIONS

Although events in Eastern Europe are still evolving, that one trillion dollar economy probably will add about $40 billion per year to world trade in the next two years. Most of that trade will be foodstuffs, agricultural implements, and industrial materials entering those countries with foreign credits providing for much of the financing. The region, which currently imports 50 million tons of grains, should be a modest exporter within three years. Credit flows may average nearly $35 billion per year during the forecast period to finance much of these trade flows and to add to the existing industrial structure. The result on the world economy is a slight, probably less than 0.35%, increase in world interest rates, some increase in world inflationary pressures and modest contributions to world growth after 1990. In 1990, world growth might actually decline because of the costs associated with restructuring those economies. Those factors continue to be monitored, but at the present time, except for the interest rate pressures, the impact of Eastern Europe upon the United States has been ignored.

The Federal Reserve's effective goal is containment of inflation, rather than the zero goal stated by several governors and presidents. Therefore, the Federal Reserve probably will ease restraints slightly in the spring when growth will appear slow and inflation will be subsiding from the winter shock. When activity accelerates, however, the Federal Reserve is expected to reimpose restraints with resulting increases in interest rates early in 1991. Then the containment of inflation once again will reduce interest rate pressures later in the year. These assumptions are contained in table 6.

The budgetary assumptions contained in table 5 assume modest defense cutbacks, but the budget clearly cannot achieve Gramm-Rudman targets. Of course, two consecutive quarters of less than 1% growth will allow the administration to set aside such constraints, but that is not expected. No significant tax changes were expected, including the capital gains and Senator Moynihan payroll tax initiatives. The sluggish economy leads to higher deficits than mandated by Gramm-Rudman. Therefore, some adjustments will be necessary that currently are not in the forecast. The result will be slower economic growth than currently projected.

Other forecasted assumptions are as follows:

a. Barrels of imported oil are expected to rise by 7.3% in 1990 and an additional 2.1% in 1991. Prices are expected to rise by 25% to $20.93 in 1990 and to $23.08 in 1991. No oil excise, gasoline, or other energy tax is expected.

b. No changes are expected in the cost of living adjustments for government programs. Adjustments of 4.7% were used for the next two fiscal years. Also, government wages were expected to grow by 4.0% next year and by 3.5% the year after.

c. The wage base for Social Security was $51,300 in 1990 and was assumed to be $53,500 in 1991. The Moynihan initiative was not assumed to pass and no further changes in the tax rate was assumed. No changes in the tax treatment of benefits was assumed.

d. Minimum wage legislation, including a training wage for teenagers, was assumed with legislation raising the minimum to $3.85 April 1990 and $4.25 on April 1991. This added about 0.4% to distributive and service wages in those two years.

e. World trade is expected to grow 7% in 1990 and 6% in 1991.

f. Postal rates were assumed to rise to 30 cents for first class mail during the second quarter of 1991.

CONCLUSION

The economy is in the midst of an auto inventory correction with no signs of a cumulating weakness in sight. Once the inventory adjustment is completed, modest economy growth again should surface. Activity following the end of the Boeing strike also should aid first quarter activity, while price moderation following the winter freeze should reduce consumer fears during the spring. Therefore, a return to modest economic growth is likely as the year progresses.

Such an outlook suggests that inflation will be contained but not diminished. Indeed, as the dollar weakens and causes the export engine to rebound late this year, some fears of accelerating inflationary pressures may again surface. Federal Reserve restraint may be needed again to prevent inflation from becoming an increasing problem during 1991. However, as long as economic policy is one of containing inflation, such adjustments should not lead to a recession.

Indeed, interest rates should come down slightly as winter price surges give way to spring moderation. this could improve prospects for housing activity, but the construction sector is expected to experience another sluggish year. Housing starts should remain under 1.4 million for the next two years.

Two prospects could significantly alter this outlook. First, our projections show an economy that is too sluggish to significantly reduce government deficits. As this is inconsistent with Gramm-Rudman targets, greater reductions in government spending may be attempted than expected here. This could also occur because of sharper declines in defense than currently projected. This would mean lower growth, inflation, and interest rates than currently projected.

Second, corporations already are suffering recessionary declines in their corporate profits. Thus far, they have not engaged in strong restructuring programs to contain costs. However, active movement in that direction could lead to greater weakness in employment and greater concern by consumers. Thus, a cumulative period of weakness that could qualify as a recession might begin under such cost cutting circumstances. Such a prospect does not seem to be likely at this time.

In general, the outlook remains one of muddling through. Economic conditions remain sluggish but not recessionary during the next two years. Investment prospects are less promising than in previous periods, although no serious problems are envisioned ahead. The dollar should weaken in value, causing the export engine to re-emerge by the end of this year. Thus, modest growth in economic activity remains the most likely outcome during the next two years.

Table 1.

U. S. Expenditures in Current Dollars
for 1989-III and 1989-IV with Forecasts for 1990-I through 1992-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	89/88	90/89	91/90	1989	1990	1991
1. Personal Consumption	3508.1	3547.5	3617.6	3668.4	3730.8	3800.1	3862.6	3924.8	3990.2	4057.9	7.3	6.7	6.9	3470.3	3704.2	3958.9
2. % Change(AR)	7.6	4.6	8.1	5.7	7.0	7.6	6.7	6.6	6.8	7.0						
3. Durable Goods	486.1	471.0	482.3	485.0	496.5	505.1	507.6	511.0	516.2	521.2	4.0	3.9	4.4	473.6	492.2	514.0
4. Autos, Trucks & Parts	225.6	205.9	215.5	217.6	226.8	232.7	234.4	234.6	238.2	240.3	1.1	4.3	6.2	214.0	223.2	236.9
5. Other Durable Goods	260.5	265.1	266.8	267.4	269.7	272.4	273.2	276.4	278.0	280.9	6.6	3.6	3.0	259.6	269.1	277.1
6. Nondurable Goods	1131.4	1139.1	1164.1	1174.8	1188.0	1205.5	1221.4	1236.6	1252.9	1269.4	6.7	5.4	5.2	1122.6	1183.1	1245.1
7. Services	1890.6	1937.5	1971.2	2008.6	2046.3	2089.5	2133.6	2177.2	2221.1	2267.3	8.5	8.3	8.4	1874.1	2028.9	2199.8
8. Pers Cons less Services	1617.5	1610.0	1646.4	1659.8	1684.5	1710.6	1729.0	1747.6	1769.1	1790.6	5.9	5.0	5.0	1596.2	1675.3	1759.1
9. % Change(AR)	6.5	-1.8	9.4	3.3	6.1	6.3	4.4	4.4	5.0	5.0						
10. Pvt Domestic Invstment	779.1	784.8	776.6	792.3	809.3	816.8	826.4	822.1	835.8	849.1	3.6	2.8	4.3	777.1	798.8	833.4
11. Residential Structures	232.1	234.8	234.9	237.7	242.7	250.3	251.8	251.9	257.7	269.0	1.2	2.6	6.7	235.2	241.4	257.6
12. Other Structures	146.2	147.1	146.8	146.0	147.1	148.5	149.2	149.8	150.4	151.8	3.4	1.4	2.2	145.1	147.1	150.3
13. Producer's Durables	373.4	367.7	370.6	375.5	379.0	378.1	385.0	389.2	392.1	392.8	5.9	2.3	3.7	367.4	375.8	389.8
14. Change in Inventories	27.4	35.2	24.3	33.1	40.5	39.9	40.4	31.2	35.6	35.5				29.4	34.5	35.7
15. Chg in Nonfarm Inv	19.8	38.3	18.5	32.7	37.2	42.6	40.9	28.3	34.1	40.1				25.2	32.8	35.9
16. Net Exports	-45.1	-53.8	-61.7	-62.7	-59.5	-68.5	-64.0	-53.7	-54.1	-47.8				-50.9	-63.1	-54.9
17. Exports	628.5	637.3	659.4	673.4	684.5	699.2	717.7	737.4	747.5	770.7	14.0	8.8	9.5	624.4	679.1	743.3
18. Imports	673.6	691.1	721.1	736.1	744.0	767.7	781.7	791.1	801.6	818.5	8.7	9.9	7.5	675.2	742.2	798.2
19. Government Purchases	1038.9	1058.6	1082.4	1094.9	1106.0	1124.8	1140.4	1152.5	1162.6	1178.0	7.0	6.3	5.1	1036.7	1102.0	1158.4
20. Federal Purchases	402.7	408.8	421.1	422.4	422.9	430.2	434.6	434.6	434.8	439.2	6.0	5.0	2.7	404.1	424.2	435.8
21. Defense	307.8	303.4	311.3	312.9	314.3	314.8	320.1	320.2	319.1	317.7	1.6	3.5	1.9	302.8	313.3	319.3
22. Nondefense	94.9	105.4	109.7	109.5	108.6	115.4	114.5	114.4	115.7	121.5	21.7	9.3	5.2	101.4	110.8	116.5
23. State and Local	636.2	649.8	661.3	672.5	683.1	694.6	705.8	717.9	727.8	738.8	7.6	7.2	6.6	632.6	677.9	722.6
24. Gross National Product	5281.0	5337.0	5414.9	5492.9	5586.6	5673.2	5765.4	5845.7	5934.5	6037.2	7.2	5.9	6.4	5233.2	5541.9	5895.7
25. Net Change(amount)	79.3	56.0	77.9	78.0	93.7	86.6	92.2	80.3	88.8	102.7				352.6	308.7	353.8
26. % Change(curr$, AR)	6.2	4.3	6.0	5.9	7.0	6.3	6.7	5.7	6.2	7.1				7.2	5.9	6.4
27. Gross Natl Product(82$)	4162.9	4168.1	4177.6	4204.9	4241.4	4256.2	4278.6	4294.9	4317.8	4342.1	2.9	1.9	2.1	4142.6	4220.0	4308.4
28. % Change(1982$, AR)	3.0	0.5	0.9	2.6	3.5	1.4	2.1	1.5	2.1	2.3				2.9	1.9	2.1
29. Implicit Price Deflator	126.9	128.0	129.6	130.6	131.7	133.3	134.7	136.1	137.4	139.0	4.2	3.9	4.2	126.3	131.3	136.8
30. % Change(AR)	3.2	3.5	5.1	3.2	3.4	4.9	4.4	4.2	4.0	4.7				4.2	3.9	4.2
31. Final Sales(curr$)	5253.6	5301.8	5390.6	5459.8	5546.1	5633.3	5725.0	5814.5	5898.9	6001.7	7.3	5.8	6.4	5203.8	5507.5	5860.0
32. Net Change from Prev	79.3	48.2	88.8	69.2	86.3	87.2	91.7	89.5	84.4	102.8						
33. Final Sales(1982$)	4141.0	4135.5	4158.7	4179.0	4210.4	4225.7	4249.0	4274.2	4292.9	4316.7	3.0	1.8	2.1	4118.1	4193.5	4283.2

Table 2.

U. S. Real Expenditures
for 1989-III and 1989-IV with Forecasts for 1990-I through 1992-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	89/88	90/89	91/90	1989	1990	1991
1. Personal Consumption	2690.1	2689.3	2705.3	2715.5	2737.1	2755.0	2768.9	2779.2	2795.2	2807.1	2.7	2.2	2.2	2668.5	2728.2	2787.6
2. % Change(1982$, AR)	5.6	-0.1	2.4	1.5	3.2	2.6	2.0	1.5	2.3	1.7						
3. Durable Goods	436.4	421.6	430.1	432.1	439.3	443.9	443.6	444.4	446.4	447.8	2.9	2.5	2.1	425.6	436.4	445.6
4. Autos, Trucks & Parts	188.4	170.9	178.7	179.8	186.8	190.4	190.7	189.5	191.8	192.2	-0.6	3.3	3.9	178.1	183.9	191.1
5. Other Durable Goods	248.0	250.7	251.4	252.3	252.5	253.5	252.9	254.9	254.6	255.6	5.6	2.0	0.8	247.5	252.4	254.5
6. Nondurable Goods	920.8	917.5	918.3	916.6	921.3	923.6	926.5	926.1	930.0	930.6	1.2	0.5	0.9	915.8	920.0	928.3
7. Services	1332.9	1350.3	1356.9	1366.8	1376.5	1387.5	1398.8	1408.7	1418.8	1428.7	3.7	3.4	3.0	1327.2	1371.9	1413.8
8. Pvt Domestic Investment	724.6	732.7	721.5	734.3	744.5	746.1	751.0	742.9	752.0	759.9	1.2	1.7	2.0	724.6	736.6	751.5
9. Residential Structures	184.8	186.0	185.1	186.0	188.6	192.7	192.1	190.3	193.3	200.6	-2.7	-0.4	3.2	188.9	188.1	194.1
10. Other Structures	120.4	120.8	119.9	118.6	118.2	119.0	118.8	118.3	118.0	118.2	-1.7	-1.0	-0.5	120.1	118.9	118.3
11. Producer's Durables	397.6	393.3	397.6	403.8	406.2	403.9	410.5	413.6	415.8	415.7	5.2	3.0	2.7	391.0	402.9	413.9
12. Change in Inventories	21.9	32.6	18.9	25.9	31.0	30.5	29.6	20.7	24.9	25.4	----	----	----	24.5	26.6	25.2
13. Chg in Nonfarm Inv	16.2	31.3	14.8	25.6	29.2	32.8	29.8	18.6	24.0	28.3	----	----	----	21.0	25.6	25.2
14. Net Exports	-57.1	-61.8	-60.3	-60.4	-56.8	-63.3	-57.9	-46.8	-46.3	-41.5	----	----	----	-56.3	-60.2	-48.1
15. Exports	593.1	600.2	617.4	625.8	631.5	639.1	648.9	660.8	665.0	679.6	10.9	6.9	5.6	587.6	628.5	663.6
16. Imports	650.2	662.0	677.7	686.2	688.3	702.4	706.8	707.6	711.3	721.1	6.4	7.0	3.3	643.9	688.7	711.7
17. Government Purchases	805.3	807.9	811.1	815.5	816.6	818.4	816.6	819.6	816.9	816.6	2.6	1.2	0.2	805.8	815.4	817.4
18. Federal Government	336.1	333.6	334.5	336.4	335.5	335.4	331.7	332.4	329.1	327.9	2.5	-0.5	-1.5	337.2	335.5	330.3
19. Federal Purchases	209.1	206.0	206.6	208.0	207.1	207.0	203.1	203.6	200.3	199.2	3.3	-1.5	-2.7	210.3	207.2	201.5
20. Value Added	127.0	127.6	127.9	128.4	128.4	128.4	128.6	128.8	128.8	128.7	1.3	1.1	0.4	126.9	128.3	128.7
21. State and Local Govt	469.2	474.2	476.6	479.1	481.1	483.0	484.9	487.2	487.8	488.7	2.7	2.4	1.5	468.6	480.0	487.2
22. State & Local Purch.	213.5	217.3	218.8	220.3	221.5	222.4	223.2	224.5	224.2	224.1	3.9	3.5	1.5	213.3	220.8	224.0
23. Value Added	255.7	256.9	257.8	258.8	259.6	260.6	261.7	262.7	263.6	264.6	1.7	1.5	1.5	255.3	259.2	263.2
24. Gross National Product	4162.9	4168.1	4177.6	4204.9	4241.4	4256.2	4278.6	4294.9	4317.8	4342.1	2.9	1.9	2.1	4142.6	4220.0	4308.4
25. % Change(1982$, AR)	3.0	0.5	0.9	2.6	3.5	1.4	2.1	1.5	2.1	2.3						
26. Final Sales Demand	4141.0	4135.5	4158.7	4179.0	4210.4	4225.7	4249.0	4274.2	4292.9	4316.7	3.0	1.8	2.1	4118.1	4193.5	4283.2
27. % Change(1982$, AR)	2.7	-0.5	2.3	2.0	3.0	1.5	2.2	2.4	1.8	2.2						
28. Gross Domestic Product	4135.9	4140.1	4150.4	4177.0	4213.3	4229.0	4252.3	4268.2	4290.7	4314.3	3.0	1.9	2.1	4115.5	4192.4	4281.4
29. Government Contribution	382.7	384.5	385.7	387.2	388.0	389.0	390.3	391.5	392.4	393.3	1.6	1.4	1.1	382.1	387.5	391.9
30. Private Domestic Product	3753.2	3755.6	3764.7	3789.8	3825.3	3840.0	3862.0	3876.7	3898.3	3921.0	3.1	1.9	2.2	3733.3	3805.0	3889.5
31. % Change(1982$, AR)	2.9	0.3	1.0	2.7	3.8	1.5	2.3	1.5	2.2	2.3						

Table 3.

Income Related U. S. Gross National Product Components
for 1989-III and 1989-IV with Forecasts for 1990-I through 1992-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	89/88	90/89	91/90	1989	1990	1991
1. Compensation of Employees	3171.9	3230.1	3296.3	3356.0	3415.2	3478.9	3547.3	3606.1	3665.3	3728.0	8.2	7.7	7.4	3145.5	3386.6	3636.7
2. Wages & Salaries	2654.7	2704.0	2752.8	2803.3	2853.6	2907.2	2963.8	3013.7	3064.0	3116.8	8.4	7.5	7.4	2632.1	2829.2	3039.6
3. Manufacturing Ind	555.7	559.9	560.6	565.8	572.6	578.8	585.2	590.7	596.5	601.7	5.5	3.0	4.2	553.0	569.5	593.5
4. Other Producing Ind	186.9	190.5	194.3	195.7	198.0	201.2	202.8	203.5	206.2	210.5	7.6	6.4	4.3	185.4	197.3	205.8
5. Distributive Industry	619.4	631.2	645.6	658.7	670.8	683.4	695.0	706.1	717.8	729.7	7.5	8.1	7.2	615.1	664.6	712.2
6. Service Industry	812.4	835.3	855.0	878.0	901.3	926.3	951.9	977.0	1000.7	1025.5	12.2	11.0	11.1	801.7	890.2	988.8
7. Military Compensation	79.3	79.7	82.7	83.0	82.3	81.6	84.5	84.6	84.4	83.9	4.2	3.9	2.4	79.3	82.4	84.4
8. Other Government	400.9	407.4	414.6	422.1	428.6	436.0	444.4	451.6	458.4	465.5	7.3	7.0	7.0	397.7	425.3	455.0
9. Supplements to W & S	517.2	526.1	543.5	552.7	561.6	571.7	583.5	592.4	601.3	611.2	7.3	8.6	7.1	513.4	557.4	597.1
10. Proprietors Income	343.3	350.9	355.8	358.7	358.9	356.1	354.9	360.5	364.9	368.2	7.5	1.5	1.3	352.3	357.4	362.1
11. Business & Professional	307.2	312.0	316.9	318.4	320.3	320.9	322.0	324.1	326.7	330.1	6.2	4.3	2.1	305.9	319.1	325.7
12. Farm Proprietors	36.1	38.8	38.9	40.3	38.6	35.2	32.9	36.4	38.2	38.1	16.4	-17.4	-4.8	46.3	38.3	36.4
13. Rental Income	5.4	5.1	12.0	11.6	12.5	11.5	10.7	11.0	11.3	12.1	-48.7	48.3	-5.3	8.0	11.9	11.3
14. Net Interest	471.5	478.4	486.3	494.2	501.4	508.6	516.4	524.9	532.5	541.6	17.4	7.9	6.3	461.1	497.6	528.9
15. Corporate Profits(adj)	295.2	267.5	259.1	260.1	264.4	262.7	268.3	267.9	278.0	284.2	-9.7	-11.8	5.0	296.7	261.6	274.6
16. National Income	4287.3	4332.0	4409.5	4480.6	4552.4	4617.8	4697.6	4770.4	4852.0	4934.1	7.3	5.9	6.6	4263.5	4515.1	4813.5
17. Indirect Business Tax	421.5	424.2	433.3	438.7	446.0	453.3	459.7	466.1	473.4	480.3	5.9	6.3	6.1	416.7	442.8	469.9
18. Capital Consumption Adj	20.5	24.2	27.4	32.4	35.9	39.3	42.8	46.4	49.6	52.7				13.1	33.8	47.9
19. Capital Cons. Allowance	544.8	545.4	542.8	543.8	548.2	550.6	552.3	556.0	559.4	563.1	2.4	1.3	2.1	539.1	546.4	557.7
20. Business Transfers	32.2	32.9	33.6	34.3	35.0	35.8	36.5	37.3	38.1	39.0	9.6	8.9	8.8	31.9	34.7	37.7
21. Net Govt Subsidies	0.3	-1.8	-3.1	-1.9	-3.2	-3.3	-3.5	-2.4	-3.3	-3.7	-50.5	-68.5	12.2	-9.1	-2.9	-3.2
22. Statistical Descrepancy	-20.5	-19.9	-28.6	-35.0	-27.7	-20.3	-20.0	-28.1	-34.7	-28.3				-18.7	-27.9	-27.8
23. Gross National Product	5281.0	5337.0	5414.9	5492.9	5586.6	5673.2	5765.4	5845.7	5934.5	6037.2	7.2	5.9	6.4	5233.2	5541.9	5895.7

Table 4.

Derivation of U. S. Personal Income
for 1989-III and 1989-IV with Forecasts for 1990-I through 1992-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1990

	Period (Quarter Year)[1]										Percentage Change			Annual Rate		
	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	89/88	90/89	91/90	1989	1990	1991
1. National Income	4287.3	4332.0	4409.5	4480.6	4552.4	4617.8	4697.6	4770.4	4852.0	4934.1	7.3	5.9	6.6	4263.5	4515.1	4813.5
Less:																
2. Adj. Corporate Profits	295.2	267.5	259.1	260.1	264.4	262.7	268.3	267.9	278.0	284.2	-9.7	-11.8	5.0	296.7	261.6	274.6
3. Social Insurance	482.0	489.2	513.3	520.7	527.5	536.1	553.5	560.5	567.3	575.6	7.8	9.4	7.6	479.3	524.4	564.2
Plus:																
4. Government Transfers	604.2	616.1	636.4	645.0	652.8	662.4	682.7	691.0	700.1	709.8	8.0	8.1	7.2	600.3	649.2	695.9
5. Social Security, etc	327.9	333.0	344.8	349.9	353.4	358.2	370.8	375.5	379.8	384.3	8.2	8.1	7.4	325.2	351.6	377.6
6. Unemployment Benefits	14.5	15.0	15.1	15.0	14.8	15.0	15.3	15.4	15.6	15.7	9.8	4.9	3.5	14.3	15.0	15.5
7. Veterans Benefits	17.3	16.9	17.5	17.4	17.3	17.1	17.6	17.5	17.5	17.3	2.2	0.0	0.9	17.3	17.3	17.5
8. Employees Retirement	88.9	90.1	93.4	95.1	96.2	97.3	100.6	102.0	103.0	104.2	7.0	7.9	7.3	88.5	95.5	102.5
9. A. F. D. C.	18.0	18.3	18.5	18.6	18.8	18.9	19.2	19.3	19.7	19.9	3.9	4.5	4.4	17.9	18.7	19.5
10. Other Govt Transfers	137.5	142.9	147.1	149.0	152.3	155.9	159.2	161.3	164.5	168.4	9.5	10.2	8.1	137.1	151.1	163.4
11. Business Transfers	32.2	32.9	33.6	34.3	35.0	35.8	36.5	37.3	38.1	39.0	9.6	8.9	8.8	31.9	34.7	37.7
12. Interest Transfers	196.2	201.0	206.8	211.6	217.0	221.2	225.5	229.6	231.9	234.2	10.3	8.9	7.5	196.7	214.2	230.3
13. Personal Dividends	113.2	115.7	117.8	119.6	121.5	123.3	125.1	127.0	129.1	131.3	10.1	7.2	6.3	112.4	120.6	128.1
Equals:																
14. Personal Income	4455.9	4540.9	4631.7	4710.3	4786.8	4861.7	4945.6	5026.8	5105.9	5188.5	9.0	7.2	6.7	4428.7	4747.6	5066.7
Less:																
15. Personal Tax Payments	649.1	665.0	683.8	703.8	703.2	716.6	736.5	755.2	757.5	772.9	10.6	8.2	7.6	648.8	701.9	755.5
Equals:																
16. Personal Disposable Inc	3806.8	3875.9	3947.9	4006.5	4083.6	4145.1	4209.1	4271.6	4348.4	4415.6	8.7	7.0	6.6	3780.0	4045.8	4311.2
Less:																
17. Personal Consumption	3508.1	3547.5	3617.6	3668.4	3730.8	3800.1	3862.6	3924.8	3990.2	4057.9	7.3	6.7	6.9	3470.3	3704.2	3958.9
18. Other Outlays	103.6	104.7	106.0	106.6	108.2	109.5	111.2	112.2	113.8	115.2	5.5	4.1	5.1	103.4	107.6	113.1
Equals:																
19. Personal Savings	195.1	223.7	224.3	231.5	244.6	235.5	235.7	234.6	244.3	242.5	42.5	13.4	2.3	206.3	234.0	239.3
20. Savings Rate(%, AR)	5.1	5.8	5.7	5.8	6.0	5.7	5.6	5.5	5.6	5.5	31.1	5.9	-4.3	5.5	5.8	5.6

Table 5.

U. S. Federal Government Activity
for 1989-III and 1989-IV with Forecasts for 1990-I through 1992-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	89/88	90/89	91/90	1989	1990	1991
1. Government Receipts	1043.2	1052.0	1094.8	1112.6	1117.4	1134.6	1171.4	1194.4	1201.4	1220.7	7.6	6.6	7.4	1046.2	1114.9	1197.0
2. Personal Tax & Nontax	459.1	471.6	486.0	499.9	496.3	505.7	520.8	533.8	533.0	543.9	11.5	7.9	7.2	460.7	497.0	532.9
3. Corporate Profits Tax	99.9	90.7	94.4	92.0	93.8	93.8	99.0	102.7	104.0	105.2	-6.4	-10.4	9.9	104.3	93.5	102.7
4. Indirect Business Tax	59.4	58.6	60.1	60.3	61.1	61.7	62.2	62.6	63.5	63.9	3.2	3.8	3.7	58.6	60.8	63.1
5. Social Security Contr	424.8	431.1	454.3	460.4	466.2	473.4	489.4	495.3	500.9	507.7	8.0	9.7	7.5	422.6	463.6	498.3
6. Government Expenditures	1187.9	1216.7	1253.0	1261.4	1278.5	1305.1	1334.2	1345.6	1358.4	1381.1	7.0	6.5	6.3	1196.7	1274.5	1354.8
7. Purchases of Goods and Services	402.7	408.8	421.0	422.4	422.9	430.2	434.6	434.6	434.8	439.2	6.0	4.9	2.8	404.1	424.1	435.8
8. Defense	307.8	303.4	311.3	312.9	314.3	314.8	320.1	320.2	319.1	317.7	1.6	3.5	1.9	302.8	313.3	319.3
9. Durables	84.5	77.5	80.6	80.5	81.3	81.2	81.5	80.8	80.3	79.6	-2.4	-1.2	-0.4	81.9	80.9	80.6
10. Nondurables	11.0	10.7	11.7	12.0	11.7	12.0	12.2	12.5	12.4	12.5	1.4	7.2	4.6	11.1	11.9	12.4
11. Military Payroll	79.3	79.7	82.7	83.0	82.3	81.6	84.5	84.6	84.4	83.9	4.2	3.9	2.4	79.3	82.4	84.4
12. Civilian Payroll	40.7	41.0	43.4	43.8	44.1	44.5	46.7	46.9	46.9	46.9	8.8	8.5	6.6	40.5	44.0	46.9
13. Other Services	85.4	87.7	85.9	86.6	87.8	88.3	88.1	88.2	88.0	87.8	0.8	4.3	1.0	83.5	87.2	88.0
14. Structures	6.8	6.8	7.0	7.0	7.1	7.2	7.1	7.2	7.1	7.0	-7.1	8.0	0.4	6.6	7.1	7.1
15. Nondefense	94.9	105.4	109.7	109.5	108.6	115.4	114.5	114.4	115.7	121.5	21.7	9.3	5.2	101.4	110.8	116.5
16. Durables	4.9	4.9	5.2	5.3	5.3	5.5	5.6	5.7	5.6	5.8	9.7	4.9	6.6	5.1	5.3	5.7
17. Nondurables	-3.1	6.6	8.4	5.8	5.0	9.9	6.6	4.8	6.0	9.4				3.3	7.3	6.7
18. CCC Inventory Chg	-10.0	-0.1	1.1	-1.6	-2.2	2.5	-1.2	-2.8	-1.6	1.5				-3.7	-0.1	-1.0
19. Other Nondurables	6.8	6.7	7.3	7.4	7.2	7.4	7.8	7.6	7.6	7.9	-5.4	4.6	5.5	7.0	7.3	7.7
20. Compensation	50.1	50.5	52.7	53.3	53.8	54.3	56.6	57.0	57.3	57.8	8.2	7.3	6.8	49.9	53.5	57.2
21. Other Services	35.9	35.9	35.5	37.3	36.8	37.9	37.8	39.1	39.0	40.6	6.5	2.1	6.1	36.1	36.9	39.1
22. Structures	7.1	7.6	7.9	7.8	7.7	7.8	7.9	7.8	7.8	7.9	2.6	11.0	0.6	7.0	7.8	7.9
23. Transfer Payments	475.6	487.7	499.7	505.3	511.0	522.7	535.6	541.0	548.2	560.3	7.8	7.8	7.2	472.7	509.7	546.3
24. Grants-In-Aid to State and Local Govt	118.3	123.0	128.6	126.9	127.7	129.3	133.2	134.6	135.4	137.3	7.4	7.1	5.5	119.6	128.1	135.1
25. Net Interest Paid	171.2	174.4	179.0	182.6	190.8	196.0	202.0	207.0	209.9	213.0	13.0	9.3	11.2	171.2	187.1	208.0
26. Deficit of Government Enterprises	20.1	22.8	24.7	24.2	26.1	26.9	28.8	28.4	30.1	31.3	-18.9	-12.7	16.4	29.2	25.5	29.7
27. Federal Surplus	-144.7	-164.7	-158.2	-148.8	-161.1	-170.5	-168.8	-151.2	-157.0	-160.4	----	----	----	-150.6	-159.7	-157.9
28. State and Local Surplus	44.9	38.7	44.1	41.7	41.1	42.7	48.7	50.8	52.0	54.6	----	----	----	45.0	42.4	51.5
29. Total Government Surplus	-99.8	-126.0	-114.1	-107.1	-120.0	-127.8	-114.1	-100.4	-105.0	-105.8				-105.6	-117.3	-106.3
30. Federal Debt held by Individuals	1949.1	1988.2	2029.5	2041.1	2077.7	2123.3	2176.9	2188.8	2223.4	2265.1	4.5	6.8	7.0	1935.7	2067.9	2213.6

Table 6.

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1990

Selected Economic Variables in the U. S. Economy
for 1989-III and 1989-IV with Forecasts for 1990-I through 1992-IV

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	89/88	90/89	91/90	1989	1990	1991
PRICES																
1. Consumer Price Index	124.7	125.9	127.8	129.1	130.4	131.7	133.3	135.0	136.7	138.2	4.8	4.7	4.7	124.0	129.8	135.8
2. % Change (AR)	3.3	3.9	6.3	4.1	4.1	4.0	4.9	5.2	5.1	4.5						
3. PPI - Indust. Commodities	112.4	112.8	114.5	115.7	116.2	117.0	118.4	120.0	120.8	121.5	5.5	3.4	3.7	112.1	115.9	120.2
4. % Change (AR)	-1.5	1.6	6.2	4.3	1.7	2.8	4.9	5.5	2.7	2.3						
5. PPI - Finished Goods	113.7	115.0	117.6	118.0	118.7	119.7	121.4	122.5	123.4	124.5	5.2	4.3	3.8	113.6	118.5	123.0
6. % Change (AR)	-0.6	4.7	9.5	1.4	2.4	3.4	5.8	3.7	3.0	3.6						
CORPORATE ECONOMY																
7. After Tax Profits	152.4	142.7	147.0	145.9	147.7	147.0	151.6	156.4	160.0	161.4	-6.8	-6.7	7.1	157.5	146.9	157.4
8. Inventory Profits	-6.3	-8.9	-23.4	-15.9	-13.9	-13.1	-16.3	-24.1	-17.8	-12.8				-18.5	-16.6	-17.8
9. Genuine Profits	172.6	156.2	143.1	147.1	149.0	147.2	146.7	141.8	150.1	154.7	-11.7	-12.9	1.2	168.4	146.6	148.3
10. Dow-Jones Index - Mean Closing	2646.2	2687.2	2583.6	2643.5	2493.6	2384.5	2315.8	2212.3	2336.4	2446.2	21.7	0.7	-7.9	2508.8	2526.3	2327.7
11. New York Composite Index - Mean Closing	190.37	191.18	184.65	188.21	178.29	172.30	168.39	163.71	170.89	177.26	20.1	0.5	-6.0	180.01	180.86	170.06
FINANCIAL																
12. Monetary Base	291.1	293.6	301.8	305.0	308.7	312.5	316.1	320.4	324.6	329.3	4.2	5.6	5.1	290.6	307.0	322.6
13. Checkable Deposits	560.3	571.1	575.3	584.5	592.6	600.7	607.7	617.0	623.8	630.7	-0.9	4.0	5.4	565.6	588.3	619.8
14. M1	778.8	791.6	799.8	812.2	823.6	835.3	845.6	858.0	868.3	879.2	0.9	4.4	5.5	783.1	817.7	862.8
15. Velocity of M1	6.738	6.697	6.726	6.718	6.738	6.748	6.776	6.771	6.792	6.823	6.3	1.4	0.9	6.640	6.733	6.790
16. M2	3135.4	3195.6	3239.5	3294.0	3348.6	3406.5	3461.4	3520.4	3577.9	3638.1	3.7	6.5	6.8	3120.7	3322.2	3549.5
17. Velocity of M2	1.674	1.659	1.661	1.656	1.657	1.655	1.655	1.650	1.648	1.649	3.5	-0.5	-0.4	1.666	1.657	1.651
INTEREST RATES																
18. Federal Funds Rate	9.08	8.61	8.24	7.83	8.17	8.67	8.93	8.73	8.56	8.55	21.8	-10.7	5.7	9.22	8.23	8.69
19. Prime Rate	10.66	10.50	10.01	9.65	9.88	10.48	11.00	10.72	10.36	10.00	16.7	-8.0	5.1	10.87	10.01	10.52
20. 3 Month Treasury Bill	7.85	7.65	7.49	7.40	7.76	8.31	8.52	8.31	8.15	8.12	21.7	-4.6	6.9	8.11	7.74	8.28
21. 6 Month Treasury Bill	7.69	7.51	7.58	7.63	7.94	8.29	8.40	8.24	8.07	8.16	16.1	-2.1	4.5	8.03	7.86	8.22
22. 1 Year Treasury Bond	8.10	7.83	8.09	7.96	8.20	8.46	8.51	8.39	8.36	8.42	11.5	-4.2	3.0	8.54	8.18	8.42
23. 7 Year Treasury Bond	8.09	7.91	8.33	8.05	8.30	8.65	8.73	8.58	8.46	8.59	-2.2	-2.2	3.1	8.52	8.33	8.59
24. 30 Year Treasury Bond	8.12	7.93	8.42	8.10	8.36	8.72	8.70	8.64	8.59	8.65	-5.7	-0.6	2.9	8.45	8.40	8.65
25. Seasoned AAA Corps	8.97	8.89	9.06	9.01	9.42	9.63	9.82	9.73	9.68	9.69	-4.7	0.3	4.8	9.26	9.28	9.73
26. FHA Mortgage Rate	10.00	9.82	10.04	9.88	10.31	10.59	10.84	10.76	10.70	10.72	-0.1	-1.2	5.4	10.32	10.21	10.76
ADDITIONAL INDICATORS																
27. Housing Starts	1337	1333	1344	1331	1375	1375	1353	1338	1385	1429	-7.3	-2.1	1.5	1385	1356	1376
28. Single Family Starts	996	977	983	974	996	1007	974	968	993	1028	-7.3	-1.9	0.1	1009	990	991
29. Multiple Family Starts	342	357	361	357	379	368	379	370	392	401	-7.4	-2.7	5.3	376	366	386
30. Unit Auto Sales	10.77	9.07	9.63	9.58	10.13	10.31	10.24	10.11	10.23	10.28	-6.4	-0.5	3.1	9.96	9.91	10.22
31. Industry Production Indx	142.2	142.3	142.3	143.5	145.0	145.2	146.3	146.6	147.8	149.1	3.3	1.6	2.4	141.7	144.0	147.5
32. Capacity Utilization	83.7	83.2	82.6	82.8	83.2	82.8	82.9	82.6	82.7	82.9	0.5	-1.1	-0.1	83.7	82.9	82.8

Table 7.

U. S. Foreign Trade Accounts
for 1989-III and 1989-IV with Forecasts for 1990-I through 1992-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	89/88	90/89	91/90	1989	1990	1991
MERCHANDISE TRADE (Not Seasonally Adjusted, Annual Rates)																
1. Merchandise Exports	354489	372362	389660	406870	396110	412250	425560	443880	435560	453410	13.2	10.5	9.6	363181	401223	439603
2. Food & Live Animals	29056	29654	30170	30620	30445	31130	31550	32020	32260	33010	12.5	2.9	5.3	29722	30591	32210
3. Beverages & Tobacco	5132	6292	6270	5790	5950	6420	6860	6410	6590	7050	20.2	11.7	10.2	5467	6108	6728
4. Crude Materials	25132	27167	27630	26920	26270	28540	29020	28950	28800	30560	6.6	2.1	7.3	26766	27340	29333
5. Mineral Fuels	9605	11208	10820	10430	9860	11250	10760	10680	10160	12240	20.4	7.5	3.5	9853	10590	10960
6. Animal & Vegetable Oil	1595	1198	1150	1180	1130	1150	1140	1170	1150	1180	-7.5	-14.3	0.7	1345	1153	1160
7. Chemicals	36686	34586	36750	39430	40185	37890	39780	42920	43760	41140	13.2	5.5	8.7	36571	38564	41900
8. Manufactured Goods	27370	28179	29650	31450	32090	32970	34110	36000	36810	37750	19.7	15.3	14.7	27352	31540	36168
9. Machinery, Trnspt. Eq.	147954	152240	158470	168520	162850	167740	172930	182550	177200	183420	9.8	10.8	8.9	148342	164395	179025
10. Misc. Manufacturing	31612	33441	37650	39270	39530	41460	43820	45620	45980	48130	31.3	22.6	16.2	32193	39478	45888
11. Commodities, n.e.c.	27034	33511	36120	37420	32630	37480	39460	40560	36000	41100	13.4	14.1	9.4	31472	35913	39280
12. Foreign Merchandise	13313	14886	14980	15840	15170	16220	16130	17000	16850	17830	12.9	10.3	9.0	14099	15553	16953
13. Merchandise Imports	474345	504550	510582	526262	531355	554771	551088	561346	564417	586701	8.1	11.3	6.6	476666	530743	565888
14. Food & Live Animals	19682	20584	22360	21940	22120	23170	24260	23210	23460	23710	3.9	8.2	5.6	20707	22398	23660
15. Beverages & Tobacco	4280	5673	4050	4250	4395	5160	4530	4690	4755	5460	8.7	-0.8	8.8	4500	4464	4859
16. Crude Materials	15239	15147	16270	16930	18160	18230	19460	19920	20850	20930	15.5	12.4	16.6	15476	17398	20290
17. Mineral Fuels	54350	55729	69472	70912	69050	71141	78288	78886	77632	80366	28.9	32.4	12.3	52967	70144	78793
18. Animal & Vegetable Oil	692	791	750	780	760	770	750	760	750	785	-14.3	5.2	-0.5	727	765	761
19. Chemicals	19656	21557	23360	22960	23170	24860	24570	24170	24460	26100	5.6	12.4	5.2	20988	23588	24825
20. Manufactured Goods	62245	63928	65110	66120	67640	68130	69160	69980	71540	72210	2.1	6.0	6.0	62957	66750	70723
21. Machinery, Trnspt. Eq.	197641	218145	209470	219560	211560	230420	221760	228560	220670	237620	5.1	5.2	4.3	207016	217753	227153
22. Misc. Manufacturing	86266	85634	83220	85670	96620	93730	90270	92450	100850	98850	8.9	17.0	6.5	76759	89810	95605
23. Commodities, n.e.c.	14292	17362	16520	17140	17880	19160	18040	18720	19450	20670	15.0	21.3	8.7	14569	17675	19220
FOREIGN TRANSACTIONS - GNP ACCOUNTS (Seasonally Adjusted, Annual Rates)																
24. Total Exports	628.5	637.3	659.4	673.4	684.5	699.2	717.7	737.4	747.5	770.7	14.0	8.8	9.5	624.4	679.1	743.3
25. Mdse Exports	370.4	376.9	394.7	401.9	406.1	417.3	430.6	443.9	445.6	463.4	14.8	9.6	10.1	369.5	405.0	445.9
26. Factor Income	134.5	137.8	140.3	144.8	148.1	151.8	154.3	158.4	162.9	167.1	15.7	8.3	9.9	135.1	146.3	160.7
27. Other Services	123.6	122.6	124.4	126.7	130.3	130.1	132.8	135.1	139.0	140.2	9.9	6.8	7.0	119.8	127.9	136.8
28. Total Imports	673.6	691.1	721.1	736.1	747.6	767.7	781.7	791.1	801.6	818.5	8.7	10.1	7.4	675.2	743.1	798.2
29. Mdse Imports	482.2	496.8	522.6	533.3	541.4	554.8	563.1	568.3	574.4	586.7	7.4	11.6	6.5	482.2	538.0	573.1
30. Factor Income	101.0	102.6	105.1	108.3	111.1	115.6	118.8	122.1	125.6	128.5	21.7	8.4	12.5	101.5	110.0	123.8
31. Other Services	90.4	91.8	93.4	94.5	95.1	97.3	99.8	100.7	101.6	103.3	3.0	3.9	6.6	91.5	95.1	101.4
32. Net Transfer Payments	15.7	19.9	15.4	14.8	16.1	20.8	15.9	15.2	16.0	21.2	4.9	8.4	1.8	15.5	16.8	17.1
33. Government Interest	33.9	32.8	32.4	32.1	35.6	37.3	39.9	41.6	43.0	44.6	14.9	2.8	23.1	33.4	34.4	42.3
34. Net Foreign Investment	-94.8	-106.5	-109.5	-109.6	-114.8	-126.6	-119.8	-110.5	-113.1	-113.6	----	----	----	-99.8	-115.1	-114.3
35. Trade Weighted Value of Dollar (3/73 = 100)	100.5	97.3	92.6	90.1	89.3	86.9	88.3	89.7	88.7	89.4	6.2	-8.9	-0.8	98.5	89.7	89.0

Table 8.

Personal Consumption Expenditure Implicit Price Deflators
for 1987-III and 1987-IV with Forecasts for 1988-I through 1990-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1988

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 87	IV 87	I 88	II 88	III 88	IV 88	I 89	II 89	III 89	IV 89	87/86	88/87	89/88	1987	1988	1989
1. Durable Goods	111.4	111.7	112.1	112.2	113.0	113.8	114.4	115.0	115.6	116.4	1.1	1.3	2.3	111.3	112.8	115.4
2. Percent Change(AR)	2.0	1.2	1.5	0.4	2.8	2.7	2.3	2.0	2.3	2.6						
3. Automobiles	119.7	120.5	120.6	121.0	121.4	122.2	122.9	123.8	124.2	125.0	1.8	0.9	2.2	120.2	121.3	124.0
4. Percent Change(AR)	-1.8	2.5	0.4	1.4	1.3	2.7	2.3	2.9	1.3	2.7						
5. Furniture	98.0	98.5	98.6	98.0	98.6	99.0	99.2	99.1	99.5	99.9	-0.3	0.5	0.9	98.0	98.5	99.4
6. Percent Change(AR)	3.5	1.9	0.5	-2.5	2.5	1.6	0.9	-0.4	1.6	1.6						
7. Other Durables	122.8	123.5	124.4	125.3	126.5	127.7	129.0	130.8	132.4	133.9	4.2	3.1	4.4	122.2	126.0	131.5
8. Percent Change(AR)	3.0	2.2	2.8	3.2	3.9	3.8	4.1	5.5	4.8	4.6						
9. Nondurables	122.9	124.2	126.8	128.2	128.9	130.5	131.8	133.5	134.7	136.4	5.4	4.9	4.3	122.6	128.6	134.1
10. Percent Change(AR)	-1.3	4.2	8.7	4.5	2.5	5.0	4.1	5.3	3.6	5.1						
11. Food	129.1	130.7	133.1	134.0	135.4	136.9	138.3	139.8	141.4	142.9	5.7	4.9	4.3	128.6	134.8	140.6
12. Percent Change(AR)	2.4	5.0	7.5	2.7	4.3	4.5	4.2	4.4	4.7	4.3						
13. Apparel	116.7	119.1	119.5	121.2	120.0	121.8	122.3	123.7	122.7	124.4	2.3	1.8	2.2	118.5	120.6	123.3
14. Percent Change(AR)	-10.5	8.7	1.2	5.9	-4.0	6.2	1.6	4.7	-3.3	5.7						
15. Gasoline and Oil	88.2	85.0	91.9	93.9	94.4	95.3	96.6	99.0	100.9	102.5	9.3	8.6	6.2	86.4	93.9	99.7
16. Percent Change(AR)	-18.2	-13.9	37.1	8.8	2.3	3.7	5.4	10.3	8.3	6.4						
17. Fuel Oil	80.6	83.2	92.3	91.1	89.1	91.2	93.2	93.6	94.8	97.6	4.9	12.9	4.3	80.5	90.9	94.8
18. Percent Change(AR)	1.2	13.8	51.2	-4.9	-8.7	9.7	9.2	1.6	5.3	12.5						
19. Other Nondurables	138.7	140.8	142.7	144.5	146.2	148.0	149.8	151.9	153.8	155.7	5.8	5.4	5.1	137.9	145.3	152.8
20. Percent Change(AR)	4.9	6.2	5.3	5.2	4.7	5.0	5.1	5.7	5.0	5.0						
21. Services	141.8	143.5	145.3	147.0	148.7	150.6	152.5	154.6	156.5	158.7	4.6	4.7	5.2	141.2	147.9	155.6
22. Percent Change(AR)	4.2	4.7	5.1	4.7	4.7	5.3	5.2	5.4	5.3	5.6						
23. Housing	144.1	146.2	148.0	149.7	151.7	153.7	155.7	157.7	159.8	162.0	4.6	5.2	5.3	143.3	150.8	158.8
24. Percent Change(AR)	6.2	6.0	4.9	4.7	5.4	5.4	5.3	5.2	5.4	5.6						
25. Electricity and Gas	115.6	117.9	120.2	121.2	121.3	123.5	124.8	125.8	126.7	128.8	2.9	4.4	4.1	116.4	121.5	126.5
26. Percent Change(AR)	-2.3	8.4	7.9	3.3	0.6	7.1	4.5	3.2	2.8	7.0						
27. Other Household Opns	130.3	131.0	131.5	132.0	132.5	133.3	133.9	135.8	136.5	137.3	1.9	1.5	2.7	130.3	132.3	135.9
28. Percent Change(AR)	1.2	2.2	1.3	1.6	1.7	2.2	1.8	5.8	2.2	2.3						
29. Transportation	128.2	129.3	131.0	132.3	133.1	134.7	136.7	138.6	140.6	142.6	3.3	2.9	5.2	129.0	132.8	139.6
30. Percent Change(AR)	-3.4	3.3	5.4	4.2	2.5	4.9	6.1	5.7	5.8	5.7						
31. Medical Care	154.0	155.8	157.9	160.3	162.8	165.4	168.2	171.1	174.0	177.0	6.7	5.7	6.8	152.8	161.6	172.6
32. Percent Change(AR)	5.8	4.8	5.4	6.3	6.4	6.5	7.0	7.1	6.9	7.1						
33. Other Services	141.7	143.2	144.6	146.1	147.6	149.2	150.7	152.2	153.8	155.5	3.8	4.2	4.2	141.0	146.9	153.1
34. Percent Change(AR)	4.0	4.2	4.1	4.2	4.1	4.4	4.1	4.0	4.3	4.5						

Table 9.

Gross National Product Implicit Price Defiators
for 1989-III and 1989-IV with Forecasts for 1990-I through 1992-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	89/88	90/89	91/90	1989	1990	1991
1. Gross National Product	126.9	128.0	129.6	130.6	131.7	133.3	134.7	136.0	137.4	139.0	4.2	3.9	4.2	126.3	131.3	136.8
2. Percent Change(AR)	3.2	3.5	5.1	3.1	3.4	4.9	4.3	3.9	4.2	4.7						
3. Personal Consumption	130.4	131.9	133.7	135.1	136.3	137.9	139.5	141.2	142.8	144.6	4.4	4.4	4.6	130.0	135.8	142.0
4. Percent Change(AR)	1.9	4.7	5.6	4.3	3.6	4.8	4.7	5.0	4.6	5.1						
5. Consumer Price Index	124.7	125.9	127.8	129.1	130.4	131.7	133.3	135.0	136.7	138.2	4.8	4.7	4.7	124.0	129.8	135.8
6. Percent Change(AR)	3.3	4.0	6.2	4.1	4.1	4.0	4.9	5.2	5.1	4.5						
7. Private Domestic Invest	107.5	107.1	107.6	107.9	108.7	109.5	110.0	110.7	111.1	111.7	2.3	1.1	2.3	107.3	108.4	110.9
8. Percent Change(AR)	-0.5	-1.5	2.0	1.0	3.0	2.9	2.1	2.3	1.8	2.2						
9. Structures	121.5	121.8	122.4	123.1	123.9	124.8	125.6	126.6	127.5	128.4	5.2	2.2	2.8	120.9	123.6	127.0
10. Percent Change(AR)	3.0	1.0	2.0	2.3	2.6	2.9	2.6	3.2	2.9	2.9						
11. Producer's Durables	93.9	93.5	93.2	93.0	93.3	93.6	93.8	94.1	94.3	94.5	0.7	-0.7	1.0	94.0	93.3	94.2
12. Percent Change(AR)	-0.8	-1.7	-1.3	-0.9	1.3	1.3	0.9	1.3	0.9	0.9						
13. Residential Structures	125.6	126.2	126.9	127.8	128.7	129.9	131.1	132.4	133.3	134.1	4.0	3.1	3.4	124.5	128.3	132.7
14. Percent Change(AR)	4.6	1.9	2.2	2.9	2.8	3.8	3.7	4.0	2.7	2.4						
15. Exports	106.0	106.2	106.8	107.6	108.4	109.4	110.6	111.6	112.4	113.4	2.9	1.7	3.7	106.3	108.1	112.0
16. Percent Change(AR)	-2.2	0.8	2.3	3.0	3.0	3.7	4.5	3.7	2.9	3.6						
17. Imports	103.6	104.4	106.4	107.3	108.1	109.3	110.6	111.8	112.7	113.5	2.1	2.8	4.1	104.9	107.8	112.2
18. Percent Change(AR)	-8.4	3.1	7.9	3.4	3.0	4.5	4.8	4.4	3.3	2.9						
19. Federal	119.8	122.5	125.9	125.6	126.1	128.3	131.0	130.7	132.1	133.9	3.4	5.5	4.3	119.9	126.5	131.9
20. Percent Change(AR)	5.5	9.3	11.6	-0.9	1.6	7.2	8.7	-0.9	4.4	5.6						
21. Federal Purchases	111.2	115.4	117.3	116.5	117.2	120.7	121.5	120.9	122.9	125.8	2.3	5.7	4.1	111.5	117.9	122.8
22. Percent Change(AR)	8.0	15.8	6.7	-2.7	2.4	12.4	2.8	-2.1	6.9	9.7						
23. Federal Value Added	133.9	134.1	139.8	140.3	140.3	140.5	146.0	146.4	146.4	146.5	5.1	4.9	4.4	133.7	140.2	146.3
24. Percent Change(AR)	0.6	0.6	18.1	1.4	0.0	0.6	16.6	1.1	0.0	0.3						
25. State & Local	135.6	137.0	138.8	140.4	142.0	143.8	145.6	147.4	149.2	151.2	4.8	4.6	5.0	135.0	141.3	148.4
26. Percent Change(AR)	3.6	4.2	5.4	4.7	4.6	5.2	5.1	5.0	5.0	5.5						
27. State/Local Purchases	122.9	123.9	125.7	126.8	128.2	129.6	131.1	132.5	134.1	135.8	4.4	4.1	4.5	122.6	127.6	133.4
28. Percent Change(AR)	1.8	3.5	5.8	3.7	4.3	4.5	4.7	4.4	4.8	5.2						
29. State/Local Value Added	146.3	148.1	149.8	151.9	153.8	155.9	157.9	160.0	162.1	164.2	5.3	5.2	5.4	145.4	152.9	161.1
30. Percent Change(AR)	5.4	5.0	4.7	5.7	5.1	5.6	5.2	5.4	5.4	5.3						

Table 10.

Details of Private Consumption in the U. S.
for 1989-III and 1989-IV with Forecasts for 1990-I through 1992-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	89/88	90/89	91/90	1989	1990	1991
Current Dollars																
1. Durable Goods	486.1	471.0	482.3	485.0	496.5	505.1	507.6	511.0	516.2	521.2	4.0	3.9	4.4	473.6	492.2	514.0
2. Autos, Trucks & Parts	225.6	205.9	215.5	217.6	226.8	232.7	234.4	234.6	238.2	240.3	-1.1	4.3	6.2	214.0	223.2	236.9
3. Furniture	173.9	175.2	175.4	174.9	175.8	177.1	176.8	178.3	178.6	180.1	7.2	1.2	1.5	173.7	175.8	178.5
4. Other	86.7	89.9	91.4	92.5	93.9	95.3	96.4	98.1	99.4	100.8	5.3	8.5	5.8	86.0	93.3	98.7
5. Nondurable Goods	1131.4	1139.1	1164.1	1174.8	1188.0	1205.5	1221.4	1236.6	1252.9	1269.4	6.7	5.4	5.2	1122.6	1183.1	1245.1
6. Food	598.1	602.2	612.7	618.9	627.2	635.6	643.4	651.3	660.1	668.1	6.3	4.8	5.2	595.0	623.6	655.7
7. Clothing & Shoes	202.2	203.7	205.5	207.0	207.8	210.2	213.0	213.5	214.8	216.3	7.0	3.8	3.3	200.0	207.6	214.4
8. Gasoline & Oil	85.2	81.4	87.8	89.3	90.1	91.2	92.4	94.5	96.2	97.7	8.8	7.3	6.3	83.5	89.6	95.2
9. Fuel Oil & Coal	19.9	22.8	25.1	22.6	22.0	22.7	23.3	23.3	23.6	24.5	3.8	14.1	2.5	20.3	23.1	23.7
10. Other	226.0	229.0	233.0	237.0	240.9	245.8	249.3	254.0	258.2	262.8	6.9	6.8	7.1	224.0	239.2	256.1
11. Services	1890.6	1937.5	1971.2	2008.6	2046.3	2089.5	2133.6	2177.2	2221.1	2267.3	8.5	8.3	8.4	1874.1	2028.9	2199.8
12. Housing	538.4	549.5	559.1	568.7	579.3	590.1	600.7	611.4	622.6	634.2	6.5	7.6	7.5	534.0	574.3	617.2
13. Utilities	93.6	99.4	97.1	98.5	98.9	101.6	103.6	104.8	106.4	109.0	1.8	3.9	7.0	95.3	99.0	106.0
14. Other	108.8	111.5	112.4	113.5	114.5	115.8	117.0	118.8	120.0	121.5	4.7	4.8	4.6	108.9	114.1	119.3
15. Transportation	126.7	130.7	134.0	136.3	138.2	141.2	144.4	147.1	150.3	153.4	7.5	8.3	8.3	126.9	137.4	148.8
16. Medical Care	459.1	475.3	489.6	503.5	518.2	533.4	549.7	566.2	582.9	600.0	13.7	12.9	12.4	453.0	511.2	574.7
17. Other	564.0	571.1	579.0	588.1	597.2	607.4	618.2	628.9	638.9	649.2	8.6	6.6	6.9	556.2	592.9	633.8
Constant Dollars																
18. Durable Goods	436.4	421.6	430.1	432.1	439.3	443.9	443.6	444.4	446.4	447.8	2.9	2.5	2.1	425.6	436.4	445.6
19. Autos, Trucks & Parts	188.4	170.9	178.7	179.8	186.8	190.4	190.7	189.5	191.8	192.2	-0.6	3.3	3.9	178.1	183.9	191.1
20. Furniture	177.4	177.9	177.9	178.5	178.3	178.9	178.2	179.9	179.5	180.3	7.5	0.7	0.6	177.2	178.4	179.5
21. Other	70.6	72.8	73.5	73.8	74.2	74.6	74.7	75.0	75.1	75.3	1.0	5.3	1.4	70.3	74.0	75.0
22. Nondurable Goods	920.8	917.5	918.3	916.6	921.3	923.6	926.5	926.1	930.0	930.6	1.2	0.5	0.9	915.8	920.0	928.3
23. Food	463.2	460.7	460.3	461.9	463.2	464.3	465.2	465.9	466.8	467.5	0.6	-0.1	0.8	462.8	462.4	466.4
24. Clothing & Shoes	173.3	171.0	172.0	170.8	173.2	172.6	174.2	172.6	175.1	173.9	4.6	2.0	1.0	168.8	172.2	174.0
25. Gasoline & Oil	96.6	95.8	95.5	95.1	95.4	95.7	95.7	95.5	95.3	95.3	-0.5	-1.2	0.0	96.6	95.4	95.5
26. Fuel Oil & Coal	24.7	27.4	27.2	24.8	24.7	24.9	25.0	24.9	24.9	25.1	-1.1	1.1	-1.7	25.1	25.4	25.0
27. Other	162.9	162.6	163.3	164.0	164.8	166.1	166.4	167.2	167.9	168.8	1.1	1.4	1.8	162.4	164.6	167.6
28. Services	1332.9	1350.3	1356.9	1366.8	1376.5	1387.5	1398.8	1408.7	1418.8	1428.7	3.7	3.4	3.0	1327.2	1371.9	1413.8
29. Housing	373.6	375.8	377.8	379.9	381.9	383.9	385.8	387.7	389.6	391.5	1.8	2.2	2.0	372.7	380.9	388.7
30. Utilities	81.0	84.3	80.8	81.3	81.5	82.3	83.0	83.3	84.0	84.6	-1.1	-0.5	2.8	81.9	81.5	83.7
31. Other	83.5	85.1	85.5	86.0	86.4	86.9	87.4	87.5	87.9	88.5	2.7	3.2	1.9	83.6	86.2	87.8
32. Transportation	98.8	101.1	102.3	103.0	103.8	104.8	105.6	106.1	106.9	107.6	4.1	5.2	3.0	98.3	103.5	106.6
33. Medical Care	298.1	305.0	310.1	314.1	318.3	322.5	326.8	330.9	335.0	339.0	6.5	6.7	5.3	296.3	316.3	332.9
34. Other	398.0	398.9	400.4	402.5	404.6	407.1	410.2	413.2	415.4	417.5	4.5	2.3	2.6	394.5	403.7	414.1

Table 11.

Productivity and Employment in the U. S. Economy
for 1989-III and 1989-IV with Forecasts for 1990-I through 1992-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	89/88	90/89	91/90	1989	1990	1991
PRODUCTIVITY																
1. Private Domestic Wage Component - %Chg(AR)	5.4	6.8	6.4	5.6	5.3	5.9	5.6	5.6	5.5	5.7	--	--	--	5.5	6.0	5.6
2. Private Productivity % Change(AR)	1.0	-0.7	-0.6	0.6	1.3	-0.6	0.3	0.1	0.7	0.6	--	--	--	0.3	0.1	0.3
3. Implicit Unit Labor Cost % Change(AR)	4.4	7.7	7.1	4.9	3.9	6.5	5.3	5.5	4.8	5.0	--	--	--	5.2	5.9	5.3
4. Private Domestic Price Deflator - %Chg(AR)	3.1	3.8	4.5	3.0	3.4	5.0	4.0	4.1	4.0	4.9	--	--	--	4.1	3.8	4.1
EMPLOYMENT																
5. Civilian Employment	117476	117770	118164	118731	119418	119972	120519	120939	121454	121913	2.1	1.5	1.8	117359	119071	121206
6. Private Employment	91110	91523	92177	92747	93287	93788	94342	94766	95178	95607	3.0	2.4	2.1	90849	93000	94973
7. Manufacturing Employment	19617	19511	19399	19404	19419	19413	19411	19393	19368	19327	1.1	-1.0	-0.2	19612	19409	19375
8. Durable Manufacturing	11527	11434	11340	11350	11363	11359	11360	11354	11349	11328	0.9	-1.6	-0.0	11537	11353	11348
9. Nondurable Mfg	8091	8077	8059	8054	8056	8054	8051	8039	8019	7999	1.4	-0.2	-0.4	8075	8056	8027
10. Mining	722	735	744	752	756	761	770	775	784	793	-0.4	4.9	3.6	718	753	781
11. Contract Construction	5320	5339	5435	5450	5465	5487	5510	5496	5501	5535	3.5	3.0	0.9	5301	5459	5511
12. Transport & Communication	5688	5764	5878	5894	5915	5928	5947	5955	5970	5981	2.8	3.5	1.0	5703	5904	5963
13. Transportation	3536	3585	3658	3672	3691	3701	3717	3723	3735	3744	5.4	4.8	1.3	3513	3681	3730
14. Communication	2151	2179	2220	2222	2224	2227	2230	2232	2235	2237	-1.1	1.5	0.5	2190	2223	2234
15. Trade	25865	26001	26212	26363	26521	26658	26788	26877	26986	27073	2.7	2.4	1.9	25809	26439	26931
16. Retail Trade	19613	19706	19864	19975	20097	20197	20296	20360	20437	20494	2.4	2.3	1.8	19574	20033	20397
17. General Merchandise	2484	2475	2502	2514	2530	2543	2552	2557	2566	2573	0.9	1.6	1.6	2483	2522	2562
18. Food	3287	3334	3378	3407	3448	3481	3509	3524	3543	3560	5.5	4.9	3.1	3270	3429	3534
19. Automobiles	2155	2167	2166	2169	2175	2180	2183	2185	2187	2188	3.2	0.7	0.6	2157	2173	2186
20. Eating	6384	6417	6473	6522	6568	6604	6629	6651	6682	6713	1.4	2.7	1.9	6369	6542	6669
21. Other	5303	5312	5345	5363	5376	5389	5423	5443	5459	5460	2.2	1.4	1.5	5295	5368	5446
22. Wholesale Trade	6252	6295	6348	6388	6424	6461	6492	6517	6549	6579	3.4	2.7	2.0	6235	6405	6534
23. Durable	3708	3735	3767	3793	3813	3835	3852	3865	3880	3896	3.8	2.9	1.9	3696	3802	3873
24. Nondurable	2544	2560	2581	2595	2611	2626	2640	2652	2669	2683	2.9	2.6	2.2	2538	2603	2661
25. Finance, Insurance and Real Estate	6834	6869	6904	6943	6980	7019	7067	7111	7158	7202	2.1	2.2	2.5	6814	6962	7135
26. Services	27063	27305	27605	27941	28231	28522	28849	29159	29411	29696	5.0	4.4	4.3	26889	28075	29279
27. Government	17807	17843	17881	17983	18060	18153	18214	18295	18356	18430	2.0	1.7	1.7	17726	18019	18324
28. Federal	2998	2979	2986	3003	3012	3022	3029	3031	3026	3025	0.6	0.6	0.7	2988	3006	3028
29. State & Local	14809	14864	14895	14980	15048	15131	15185	15264	15330	15405	2.3	1.9	1.9	14739	15014	15296
30. Total Payroll	108917	109366	110058	110730	111347	111941	112556	113061	113534	114037	2.8	2.3	2.1	108576	111019	113297
31. Unemployment Rate	5.2	5.3	5.3	5.2	5.1	5.1	5.1	5.2	5.2	5.2	-4.4	-1.3	0.0	5.2	5.2	5.2

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COLLEGE OF BUSINESS ADMINISTRATION

May 1990

Dr. Donald Ratajczak, Director

ECONOMIC FORECASTING CENTER

SOFT LANDING FAILS TO LEAVE INFLATION BEHIND

Dr. Donald Ratajczak
Director
Economic Forecasting Center

SUMMARY

After being slashed sharply, auto production has now rebounded to current sales levels. Continued sales incentives are preventing any further slump in auto sales, assuring modest production gains into the summer. However, the auto industry probably lost $3.1 billion in domestic profits during the first quarter and cannot continue the incentive programs indefinitely. Therefore, some weakness should reappear there when the incentives end.

A rebound in Boeing production and the absence of any production stopping natural catastrophes has offset the auto production weakness during the first quarter. Also, an unusually mild winter following the December freeze led to a $6.8 billion increase in structures. Current vacancy rates and mortgage rates suggest that the trend for structures should be downward. Therefore, a decline of $8.2 billion in structures is forecast for the second quarter. Defense also is declining, leading to no contributions from federal government expenditures. Indeed, such expenditures are projected to fall by an inflation adjusted 1.8% in 1991.

Yet, despite these unsustainable sources of strength during the first quarter, economic activity should continue to grow modestly during the next two years. Despite the on again, off again actions of auto sales, consumer spending should remain moderately strong during the next two years. Furniture sales may fall as higher mortgage rates hurt housing activity. But more modest price increases should aid food and clothing consumption later this year. A sharp slump in auto sales for producers' goods also should be reversed, although truck sales could remain sluggish well into 1991. Other capital spending should continue to grow modestly during the next two years.

Both exports and imports are slowing from 1989 rates of growth. However, expansion of European markets should more than offset any lost competitiveness in Asian markets. Auto transplants should displace more imports than domestically produced cars, while oil imports should grow more slowly as energy consumption grows more slowly during the next two years. Growth in profits from the rest of the world also should aid factor incomes in the trade sector.

Throughout this period, government spending and taxing policy will not stimulate economic activity. Because of budgetary constraints, state and local governments are expected to sharply reduce their hiring and spending growth rates. Government tax rates also are expected to drift upward, following some modest declines last year.

The current budgetary summit is expected to provide damage control for a deficit that is again growing on a national income accounts basis. The deficit should fall following the summit, but no dramatic reductions are expected. For example, the deficit for 1991 is expected to be the same as in 1988, following higher deficits for 1989 and 1990.

Of course, the economy is only expanding slightly more than 2% at the current time. This is not slow enough to reduce inflationary pressures. The implicit price deflator should increase 4.2% during the next two years. The consumer price index should rise 5% in 1990 before subsiding slightly to a 4.9% gain in 1991. Unemployment should drift upward to 5.5% in 1991, but this will not be enough to moderate the growth in domestic wage compensation. Following gains of 5.5% in 1989, compensation should grow by 5.3% in 1990 and 5.8% in 1991. Thus, the bout of slow growth has done little to reverse gradually rising inflationary pressures.

Economic activity is expected to be strong enough to improve profit margins slightly. As a result, after tax profits should rise 1.9% this year and 10.9% in 1991. Although interest rates should drift upward following a spring bond market rally, stock prices should continue to advance modestly this year. The Dow Jones Index should average 2676 for 1990 before succumbing to interest rate pressures and falling slightly in 1991.

The prime rate should remain at 10% until late this year, when Federal Reserve restraint to fight inflation is expected to lead to a rise to 11.5% by the end of 1991. Long-term interest rates should decline only modestly this summer before resuming an upward drift to 9.35% on the long-term government bond by the summer of 1991. A rally in bonds then is expected.

Although Hooverian budgetary changes to eliminate the deficit could turn another period of slow economic growth into a recession in the second half of 1991, no recession currently is projected in the forecast period. At the same time, no substantial reduction in inflationary pressures or in interest rates is foreseen.

OUTLOOK

If the purpose of the Federal Reserve restraint during the last three months has been the prevent the freeze induced inflationary surge from spreading into industrial prices and wage demands, the restraint was a success. Despite an 8.5% annualized increase in the CPI and an increase in social security tax rates and health insurance premiums, private wage compensation actually slowed from previous quarters. These moderating wage costs allowed profit margins to increase, leading to an end of the downward slide in corporate profits. At the same time, production reductions in manufacturing sharply reduced an overhang of inventories. Indeed, the inventory cutting may have been so vigorous that some delivery delays and accelerating industrial prices in metals and plastics were occurring as the first quarter ended.

However, the economy's slowing has been too short-lived to effectively reduce underlying inflation. High interest rates may have reduced the desire to build plant capacity, although cost effective investments continue to be pursued. Only the paper and chemicals industries show any likelihood of creating capacity sufficient to pressure prices downward during the next two years. Moreover, profit margins increased during the first quarter, suggesting that sufficient aggregate demand was present to allow some cost shifting to the consumer. Since the economy had just completed only 1.1% real growth during the fall and the winter rebound was only to a 2.1% gain, substantially slower growth would have been required to create substantial reductions in inflation. Obviously, no desire to provide such restraint was apparent.

Therefore, the economy has completed a short period of economic stall without slowing inflationary pressures. Of course, containment rather than reduction probably was the goal of this administration. Throughout the Economic Report of the President, the president's advisors indicated that faster than normal growth in monetary aggregates might be justified in 1990. No concern about slowing inflationary pressures was apparent anywhere, except to the extent that the advisors declared that economic growth increased productivity and therefore added to inflationary restraint, at least until an optimum, noninflationary growth path was attained.

Thus, the Federal Reserve has prevented inflation from intensifying but it has not provided an economic foundation for reduced inflationary pressures. Indeed, monetary restraint only stalled the downward drift in the dollar (the dollar rallied against the yen but fell against European currencies.) Although oil prices

have retreated from the winter highs, they remain several dollars per barrel above last summer's lows. Favorable production conditions still might create a favorable supply shock in agriculture, as soil moisture has been restored by unusually moist spring conditions. Indeed, some fields remain under water, but they are sufficiently far south that soybeans can replace their normal crops (corn and soybeans) without serious fear of a damaging freeze. Nevertheless, inflation probably will gradually reintensify after the summer, as gradually rising labor costs and sufficient aggregate demand combine to further push cost pressures to the consumer. The Federal Reserve might respond to these inflationary pressures through another bout of monetary restraint following the congressional elections, but only modest restraint is assumed at that time.

Will the consumer continue to live with moderate inflation, or will current price increases cause another consumer rebellion? Clearly, the consumer is looking for bargains. If automobile prices are higher than they are expected to be, consumers will wait until new incentives are offered. As a result, auto sales and production should continue to exhibit a stop-go pattern during the next two years. Total sales should remain near 10 million passenger cars during the next two years.

Furniture sales will slow as the high interest rate environment slows housing activity. Housing starts are expected to fall to 1.3 million in 1991, before a modest improvement occurs late that year. Food and energy purchases actually dropped as prices soared, while clothing sales slowed. Some rebound is expected in sales as prices grow more slowly.

However, the consumer appears to be unwilling to restrain services purchases as prices rise. Transportation and lodging services slowed as prices rose in the winter, but medical and educational services showed little response to accelerating prices. Some slowing in demand for these services is expected as prices continue to accelerate. However, the price responsiveness of service expenditures remains surprisingly low.

Of course, consumers could lose confidence in future employment and begin building their savings. Also, the recent stall in asset prices has allowed the asset-outlay ratio to erode. If this is expected to persist, and our forecast shows that further deterioration in that ratio is expected, savings could increase, causing a sharp slide in consumer spending. However, consumer debt positions and the only modest increase in unemployment suggests that such consumer changes are not likely.

Modest economic expansion also is benefitting from strong capital spending. Although industrial expansion is not being actively pursued in most industries, with capacity growing only 2.5% in 1990, and 2.7% in 1991, cost cutting remains aggressive. Recent capital spending intentions have been revised upward to show a gain of 7.8%, as compared to an 8.7% increase in 1989. As a result, our estimates of non-auto producers' durables should increase 5.9% in 1990 and 4.8% in 1991. This is down only modestly from the 6.8% gains of the previous year. Producer purchases of autos and trucks dropped sharply in the fall and barely increased during the winter. Truck sales are expected to remain sluggish during the next two years, as more carriers consolidate. However, rental fleets should be more aggressive at purchasing vehicles later this year. As a result, producers' durables should grow almost as much in 1990 and 1991 as they did in 1990.

Government certainly will not provide an engine of growth. Defense spending is falling in real terms, while a $48 billion operating deficit by state and local governments during the first quarter means higher taxes and slower spending growth in that sector. The government sector may actually be an engine of restraint in 1991, when inflation adjusted spending is projected to fall slightly. More rapid reductions in defense programs could lead to greater economic weakness than currently projected. However, such an adjustment almost surely will lead to lower interest rates than currently projected. The interest sensitive portion of the economy (housing and consumer durables) would then rebound, at least partially offsetting some of the weakness in defense spending. Also, the lower interest rates might reduce the dollar's value, leading to strong sales abroad. Therefore, a cutback in defense should have only a short-term negative impact upon the economy. Nevertheless, large cutbacks could lead to a mild recession by 1992 before the resources released from the military are absorbed into alternative uses.

Although American producers are becoming more competitive in Europe, and the European market appears to be strengthening, foreign trade should provide a much smaller engine of growth than in the past few years. The dollar has rallied against Asian currencies. Also, the Asian economy is not growing as rapidly as in recent years. Therefore, export opportunities there should not grow very rapidly. Thus, export growth should be less than half as rapid as in 1989.

Imports also should grow more slowly as oil inventories have been restored following the freeze and as auto transplants begin to displace imported vehicles. Also, a glut of inventories of imported goods should slow the flow of manufactured goods into this country for most of this year. The inventory problem will not be significant next year, however.

In 1989, 31% of economic growth was caused by improved foreign trade. In 1990, the contribution from foreign trade is expected to fall to 19%. By 1991, less than 11% of the economic gains will be attributed to an improving trade balance.

If inventories were bloated, slowing in the government, trade, and capital spending sectors along with continued declines in construction could lead to recession. However, inventories have been declining in the nonfarm sector. As a result, few inventory excesses exist. With rising delivery delays, some increase in inventory investment is assured for the remainder of this year and into 1991. Of course, if weakness persists in the other sectors when inventories are restored to desirable levels at that time, and economic downturn could develop. However, inventory increases currently are seen as occurring so gradually to prevent any adjustment next year.

Although the budgetary summit could do little to harm economic conditions in 1990, and could even help them if credit markets become convinced that deficit reductions will lower interest rates, serious tax increases for 1991 could lead to an unfortunate change in budgetary policy when economic conditions could again raise the specter of recession. While a recession in 1990 is virtually out of the question, a modest slump in 1991 still could be generated by restrictive monetary policy and changed tax policy to reduce the deficit.

Currently, economic activity remains modest and inflationary pressures are subsiding. As a result, some reduction in interest rates is likely. However, once the winter price surge has become only a painful memory, a rebound in inventory investment should outstrip corporate cash flow. If consumer savings remain modest while positive benefits in government deficit reduction remain several months away, interest rates could again drift upward late in 1990 and early in 1991. Renewed Federal Reserve restraint to reduce inflationary pressures should lead to renewed increases in interest rates. Furthermore, risks that inflation may be getting out of hand should cause long-term rates to rise along with short-term rates. Later in the year, however, as fears of excessive economic slowing surface, long-term rates could rally even as short-term rates are pressured further upward.

The prime rate should remain near 10% for the remainder of this year. By the middle of next year, however, the rate should climb to 11.5%. Mortgage rates should drift upward to a 10.4% average this year and a debilitating 11.2% in 1991. Interest rate relief then will surface as the economy slows later that year.

With falling interest rates and rising corporate profits this summer, the stock market should reach new highs and could even breech 3000 on the Dow Jones average. Later, however, interest rates will be rising while the growth in profitability will be slowing. Ultimately, profits could again be squeezed late in 1991. No serious sell-off is expected in the stock market. Moreover, some positions could do quite well, including those who can benefit from a growing Europe and who are aiding the cost cutting investments, such as technology and software companies. However, a return to little direction in the markets is expected sometime in 1991, as the battle to contain inflation once again is waged.

ASSUMPTIONS

The slow pace at which Eastern Europe is establishing convertibility of its currency may slow the growth of European markets slightly. However, the dollar has been declining relative to European currencies, establishing opportunity for exporters to resume their growth. The United States should be running a surplus with Europe this year and next, although its deficits with the Persian Gulf will be growing and its Asian deficits should remain largely unchanged.

Defense expenditures are expected to show no growth in nominal terms during the next two years. U.S. troop levels should fall by 33,000 in 1990 and by a larger 55,000 in 1991. Troops abroad should experience even larger reductions, although most of those changes will occur in 1991. Defense procurement also is expected to fall by 2% in nominal terms for each of the next two years. While these reductions are substantial, they amount to only a one month change in private employment over a two year period and a reduction of less than $8 billion in inflation adjusted expenditures over that time, less than 7% of the projected growth in economic activity. Most of the government expenditures assumptions are contained in table 5.

However, the $48 billion operating deficit in state and local governments is not contained in our reported tables. These governments were assumed to use a variety of tax rate changes and spending restraint to halve that deficit during the next two years. (This assumes that some governments balance their budgets while others get out of balance during that time). About two-thirds of the adjustment was assumed in spending restraint, which is traditionally high for state and local government deficits. Nevertheless, some of the large deficits was assumed to be in response to natural disasters, where tax changes and expenditures reductions were used.

The Federal Reserve was assumed to follow an inflation containment program, allowing modest expansion of monetary aggregates later this year. Some restraint was anticipated early next year, but resumed accommodation was assumed for later in 1991. This latter assumption might not develop. If so, a mild recession could begin toward the end of 1991. Other assumptions about budgetary and monetary policy are reflected in tables 5 and 6.

Other forecasted assumptions are as follows:

a. Barrels of imported oil are expected to rise by 6.4% in 1990 and an additional 4.5% in 1991. Prices are expected to rise by 11% to $18.59 in 1990 and to $20.24 in 1991. No oil excise, gasoline, or other energy tax is assumed, although the budgetary summit could generate and energy tax.

b. No changes are expected in the cost of living adjustments for government programs. Adjustments of 5.0% were used for the next two fiscal years. Also, government wages were expected to grow by 3.6% next year and by 3.5% the year after.

c. The wage base for Social Security was assumed to be $53,500 in 1991 and $56,000 in 1992. No further changes in the tax rate were assumed. No changes in the tax treatment of benefits was assumed.

d. Minimum wage legislation, including a training wage for teenagers, was assumed with legislation raising the minimum to $3.85 April 1990 and $4.25 on April 1991. This added about 0.4% to distributive and service wages in those two years.

e. World trade is expected to grow 5% in 1990 and 4% in 1991.

f. Postal rates were assumed to rise to 30 cents for first class mail during the second quarter of 1991.

g. Fears of labor disputes in autos added to summer production at the expense of next fall. No other wage dispute impacts were assumed.

CONCLUSION

In terms of economic growth, the economy has achieved a soft landing. Inventory excesses have been removed from the auto sector while the erosion in profits that threatened massive layoffs has stopped. However, the slowdown has not removed underlying inflationary pressures. Wage compensation continues to grow in excess of 5%, while corporate profit gains have been achieved by raising profit margins. Further cost shifting to consumers is likely if robust economic growth resumes. Thus, the sluggish growth rate, which should restrain economic growth to 2.2% this year and only 2.1% in 1991, will exert no meaningful slowing in inflationary pressures. As measured by the implicit price deflator, inflation should remain at the 4.2% recorded in 1989 in both 1990 and 1991. Consumer prices should be rising nearly 5% in both years.

A recession in 1990 certainly can be ruled out. Furthermore, a recession in 1991 is unlikely and should not occur if our assumptions prove to be correct. However, those assumptions include the absence of any serious tax increases to reduce the federal deficit. They also include a modest rate of resource reallocation from defense to alternative uses. If the defense adjustments are larger than assumed, or the deficit reduction program requires more tax changes than anticipated, a recession cannot be ruled out for the latter part of 1991. However, those policies leading to recession are not yet in place and are assumed not to be put in place.

The forecast also assumes that the Federal Reserve will accept inflationary containment and not pursue a policy of achieving zero inflation in any reasonable period of time. Otherwise, interest rates would be higher this year with economic activity weakening more dramatically early next year. Rising unemployment then would provide more slowing in wage compensation than currently assumed. However, the resulting dollar decline would slow the benefits of such a policy in restraining inflation until a substantial decline in economic activity had occurred. That is why containment rather than inflationary reduction is assumed.

In short, the economy probably is faced with more uncertainties for 1991 than in the past as policies evolve. A recession is unlikely without some change in the policies assumed here, but policies that could lead to recession before the end of this forecast period are currently being discussed.

Unfortunately, relief from rising interest rates should not last past this summer. Therefore, any increase in stock market values should be reversed by the fall. Investors should face another year of little direction in 1991. On balance, however, the economy will continue to move ahead, and inflation will not be getting worse. More could have been hoped, but worse could have been achieved.

Table 1.

U. S. Expenditures in Current Dollars
for 1989-IV and 1990-I with Forecasts for 1990-II through 1992-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	89/88	90/89	91/90	1989	1990	1991
1. Personal Consumption	3550.6	3639.2	3688.6	3755.0	3812.7	3884.4	3952.1	4015.2	4069.4	4143.1	7.3	7.3	6.9	3471.1	3723.9	3980.3
2. % Change(AR)	4.9	10.4	5.5	7.4	6.3	7.7	7.2	6.5	5.5	7.4						
3. Durable Goods	469.5	492.9	493.8	504.3	500.3	507.9	511.7	520.7	507.5	515.8	4.0	5.2	2.8	473.3	497.8	512.0
4. Autos, Trucks & Parts	205.3	221.4	221.9	231.2	225.9	234.0	236.3	245.3	227.8	235.0	1.1	5.2	4.8	213.9	225.1	235.9
5. Other Durable Goods	264.2	271.5	271.9	273.1	274.4	273.9	275.4	275.4	279.7	280.8	6.5	5.1	1.2	259.4	272.7	276.1
6. Nondurable Goods	1142.4	1166.9	1173.4	1186.5	1201.8	1222.6	1242.6	1254.4	1273.3	1292.4	6.8	5.2	5.6	1123.4	1182.2	1248.2
7. Services	1938.7	1979.5	2021.4	2064.2	2110.6	2153.9	2197.8	2240.1	2288.6	2334.9	8.5	9.0	8.6	1874.4	2043.9	2220.1
8. Pers Cons less Services	1611.9	1659.7	1667.2	1690.8	1702.1	1730.5	1754.3	1775.1	1780.8	1808.2	5.9	5.2	4.8	1596.6	1680.0	1760.2
9. % Change(AR)	-1.4	12.4	1.8	5.8	2.7	6.8	5.6	4.8	1.3	6.3						
10. Pvt Domestic Invstment	770.1	761.4	771.3	793.0	801.9	816.9	823.1	839.1	844.4	845.7	3.1	1.1	6.3	773.5	781.9	830.9
11. Residential Structures	232.6	238.6	235.6	230.2	231.4	234.5	237.8	239.6	240.3	247.1	0.9	-0.3	1.8	234.7	234.0	238.1
12. Other Structures	146.4	150.1	147.4	148.2	150.2	150.9	152.9	153.9	154.3	155.7	3.2	2.8	2.7	144.9	149.0	153.0
13. Producer's Durables	365.0	376.1	385.4	390.2	391.7	400.2	405.1	409.8	409.5	413.5	5.7	5.2	5.3	366.8	385.9	406.2
14. Change in Inventories	26.1	-3.5	2.6	24.4	28.6	31.3	27.3	35.8	40.3	29.4				27.2	13.0	33.7
15. Chg in Nonfarm Inv	26.4	-8.9	-0.9	17.7	27.8	25.9	24.6	32.0	45.3	26.5				22.2	8.9	32.0
16. Net Exports	-38.8	-40.1	-31.1	-28.4	-31.7	-25.8	-24.3	-27.8	-27.4	-24.0				-47.1	-32.8	-27.0
17. Exports	643.5	646.7	650.4	665.7	677.9	697.4	713.3	724.6	737.7	749.8	14.3	5.5	8.8	625.9	660.2	718.3
18. Imports	682.3	686.7	681.5	694.1	709.6	723.2	737.6	752.4	765.1	773.8	8.3	3.0	7.4	673.0	693.0	744.6
19. Government Purchases	1058.3	1080.6	1096.9	1102.1	1117.8	1130.2	1139.3	1147.1	1167.0	1181.3	7.0	6.1	4.2	1036.6	1099.4	1145.9
20. Federal Purchases	405.1	412.8	420.2	417.7	423.2	426.3	425.2	424.1	432.8	437.1	5.8	3.8	2.1	403.2	418.5	427.1
21. Defense	300.9	309.0	307.4	307.1	305.6	309.6	307.6	307.8	305.4	307.7	1.4	1.7	0.1	302.2	307.3	307.6
22. Nondefense	104.2	103.7	112.8	110.6	117.6	116.7	117.6	116.3	127.4	129.4	21.3	10.0	7.5	101.1	111.2	119.5
23. State and Local	653.2	667.9	676.7	684.4	694.6	703.9	714.1	723.0	734.2	744.2	7.8	7.5	5.6	633.4	680.9	718.8
24. Gross National Product	5340.2	5441.2	5525.7	5621.7	5700.7	5805.7	5890.2	5973.6	6053.4	6146.1	7.2	6.5	6.4	5234.0	5572.3	5930.7
25. Net Change(amount)	59.2	101.0	84.5	96.0	79.0	105.0	84.5	83.4	79.8	92.7				353.4	338.3	358.4
26. % Change(curr$, AR)	4.6	7.8	6.4	7.1	5.7	7.6	6.0	5.8	5.5	6.3				7.2	6.5	6.4
27. Gross Natl Product(82$)	4174.1	4195.8	4219.7	4258.8	4269.9	4301.1	4319.2	4342.0	4344.5	4357.8	3.0	2.2	2.1	4144.1	4236.1	4326.7
28. % Change(1982$, AR)	1.1	2.1	2.3	3.8	1.0	3.0	1.7	2.1	0.2	1.2				3.0	2.2	2.1
29. Implicit Price Deflator	127.9	129.7	131.0	132.0	133.5	135.0	136.4	137.6	139.3	141.0	4.2	4.2	4.2	126.3	131.6	137.1
30. % Change(AR)	3.2	5.7	3.9	3.1	4.7	4.5	4.2	3.5	5.1	5.0				4.2	4.2	4.2
31. Final Sales(curr$)	5314.2	5444.7	5523.1	5597.3	5672.1	5774.4	5862.9	5937.8	6013.1	6116.7	7.4	6.8	6.1	5206.9	5559.3	5897.1
32. Net Change from Prev	60.6	130.5	78.4	74.2	74.8	102.3	88.5	74.9	75.3	103.6						
33. Final Sales(1982$)	4151.9	4193.2	4213.9	4237.8	4246.8	4276.1	4299.9	4316.6	4315.6	4339.3	3.1	2.4	1.9	4122.2	4222.9	4302.1

Table 2.

Georgia State University

College of Business Administration
Economic Forecasting Center
May 1990

U. S. Real Expenditures
for 1989-IV and 1990-I with Forecasts for 1990-II through 1992-I

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	89/88	90/89	91/90	1989	1990	1991
1. Personal Consumption	2693.7	2710.1	2722.6	2750.8	2759.4	2776.1	2791.8	2810.0	2808.3	2823.3	2.7	2.5	2.2	2669.6	2735.7	2796.6
2. % Change(1982$, AR)	0.5	2.5	1.9	4.2	1.3	2.4	2.3	2.6	-0.2	2.2						
3. Durable Goods	420.3	437.1	436.9	443.6	438.1	441.6	443.4	448.5	434.7	439.1	2.8	3.2	0.7	425.2	438.9	442.1
4. Autos, Trucks & Parts	170.4	182.2	182.3	189.7	184.1	189.3	190.4	197.2	181.2	185.5	-0.7	3.7	2.7	178.0	184.6	189.5
5. Other Durable Goods	249.9	254.9	254.6	253.9	254.0	252.3	253.0	251.3	253.5	253.6	5.5	2.9	-0.7	247.3	254.4	252.5
6. Nondurable Goods	921.1	912.2	912.1	920.7	921.5	924.5	928.2	931.6	932.5	933.8	1.3	-0.0	1.4	916.7	916.6	929.2
7. Services	1352.2	1360.7	1373.6	1386.5	1399.8	1410.0	1420.2	1429.9	1441.1	1450.4	3.7	4.0	3.3	1327.7	1380.2	1425.3
8. Pvt Domestic Investment	717.3	710.9	715.0	730.3	732.9	742.7	743.4	753.4	752.3	748.5	0.7	0.2	3.6	720.7	722.3	748.0
9. Residential Structures	184.3	188.1	184.2	178.7	178.4	179.3	180.4	180.3	179.3	182.8	-2.9	-3.3	-1.4	188.5	182.4	179.8
10. Other Structures	120.3	121.8	118.5	118.1	118.7	118.5	119.2	119.0	118.4	118.7	-1.8	-0.6	-0.4	120.0	119.3	118.8
11. Producer's Durables	390.6	398.4	406.5	412.5	412.7	419.9	424.6	428.7	425.7	428.5	5.0	4.4	4.2	390.3	407.5	424.7
12. Change in Inventories	22.2	2.6	5.8	21.0	23.1	25.0	19.2	25.4	28.9	18.5				21.9	13.1	24.6
13. Chg in Nonfarm Inv	18.0	-2.5	3.3	16.7	22.6	21.1	17.3	22.9	32.1	16.4				17.7	10.0	23.4
14. Net Exports	-47.2	-41.2	-38.5	-39.0	-41.3	-34.4	-31.6	-34.0	-33.4	-28.9				-52.6	-40.0	-33.4
15. Exports	606.6	608.0	606.2	615.8	621.9	633.4	642.0	647.5	653.4	658.9	11.2	4.0	5.1	589.2	613.0	644.1
16. Imports	653.8	649.2	644.7	654.8	663.2	667.8	673.6	681.5	686.8	687.8	6.1	1.7	3.7	641.8	653.0	677.4
17. Government Purchases	810.4	816.1	820.6	816.7	818.9	816.7	815.6	812.6	817.3	814.9	2.7	1.4	-0.3	806.4	818.1	815.6
18. Federal Government	333.3	335.2	339.2	335.3	336.2	333.1	330.7	327.4	331.1	327.9	2.5	-0.2	-1.8	337.1	336.5	330.6
19. Federal Purchases	205.7	207.0	209.7	206.5	208.4	205.5	203.2	199.9	204.0	201.3	3.3	-1.1	-2.3	210.3	207.9	203.2
20. Value Added	127.6	128.2	129.5	128.8	127.8	127.6	127.5	127.5	127.1	126.6	1.3	1.3	-0.9	126.9	128.6	127.4
21. State and Local Govt	477.0	480.9	481.4	481.4	482.7	483.6	484.9	485.2	486.2	487.0	2.9	2.6	0.7	469.3	481.6	485.0
22. State & Local Purch.	220.1	223.2	223.0	222.6	223.3	223.8	224.5	224.4	224.7	225.1	4.2	4.2	0.6	214.0	223.0	224.4
23. Value Added	256.9	257.7	258.4	258.8	259.4	259.8	260.4	260.8	261.5	261.9	1.7	1.3	0.8	255.3	258.6	260.6
24. Gross National Product	4174.1	4195.8	4219.7	4258.8	4269.9	4301.1	4319.2	4342.0	4344.5	4357.8	3.0	2.2	2.1	4144.1	4236.1	4326.7
25. % Change(1982$, AR)	1.1	2.1	2.3	3.8	1.0	3.0	1.7	2.1	0.2	1.2						
26. Final Sales Demand	4151.9	4193.2	4213.9	4237.8	4246.8	4276.1	4300.0	4316.6	4315.6	4339.3	3.1	2.4	1.9	4122.2	4222.9	4302.1
27. % Change(1982$, AR)	1.1	4.0	2.0	2.3	0.9	2.8	2.3	1.6	-0.1	2.2						
28. Gross Domestic Product	4139.7	4166.6	4189.8	4228.7	4238.5	4269.0	4287.1	4309.3	4312.9	4326.6	3.0	2.2	2.1	4115.4	4205.9	4294.6
29. Government Contribution	384.5	385.9	387.9	387.6	387.2	387.4	387.9	388.3	388.6	388.5	1.6	1.3	0.2	382.1	387.2	388.1
30. Private Domestic Product	3755.2	3780.7	3801.9	3841.1	3851.3	3881.6	3899.2	3921.0	3924.3	3938.1	3.1	2.3	2.3	3733.2	3818.8	3906.5
31. % Change(1982$, AR)	0.2	2.7	2.3	4.2	1.1	3.2	1.8	2.3	0.3	1.4						

Table 3.

Income Related U. S. Gross National Product Components
for 1989-IV and 1990-I with Forecasts for 1990-II through 1992-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	89/88	90/89	91/90	1989	1990	1991
1. Compensation of Employees	3225.9	3282.3	3331.9	3386.2	3437.2	3503.1	3564.6	3624.9	3680.9	3752.8	8.1	6.8	7.0	3144.4	3359.4	3593.4
2. Wages & Salaries	2700.1	2744.1	2786.1	2831.5	2872.9	2925.2	2977.2	3027.9	3074.3	3131.4	8.3	6.7	6.9	2631.1	2808.7	3001.2
3. Manufacturing Ind	559.6	560.1	567.8	577.2	582.2	589.4	597.1	605.8	609.9	618.5	5.5	3.4	5.0	552.9	571.8	600.6
4. Other Producing Ind	190.1	193.3	190.0	188.3	189.1	191.1	193.7	194.8	195.9	199.5	7.5	2.6	1.9	185.3	190.2	193.9
5. Distributive Industry	631.2	644.1	652.1	664.8	676.3	690.2	703.3	717.1	728.4	741.2	7.5	7.2	7.6	615.1	659.3	709.8
6. Service Industry	832.2	849.8	869.9	891.1	911.2	932.5	955.3	977.3	1001.8	1025.8	12.1	9.9	9.8	801.0	880.5	966.7
7. Military Compensation	79.6	82.6	81.6	81.3	80.7	83.6	83.1	82.1	80.8	83.1	4.2	2.9	1.0	79.3	81.6	82.4
8. Other Government	407.4	414.3	424.7	428.8	433.4	438.4	444.7	450.8	457.5	463.3	7.3	7.0	5.3	397.7	425.3	447.9
9. Supplements to W & S	525.8	538.2	545.8	554.9	564.3	577.9	587.4	597.0	606.6	621.4	7.3	7.3	7.5	513.4	550.8	592.2
10. Proprietors Income	350.3	374.6	376.7	382.8	392.5	399.5	396.6	396.7	399.0	405.8	7.4	8.4	4.3	352.1	381.7	398.0
11. Business & Professional	311.8	322.7	329.4	337.6	345.2	348.9	352.1	355.3	358.1	360.2	6.2	9.1	6.0	305.9	333.7	353.6
12. Farm Proprietors	38.5	51.9	47.3	45.2	47.3	50.6	44.5	41.4	40.9	45.6	16.2	3.7	-7.5	46.2	47.9	44.4
13. Rental Income	4.8	8.9	9.5	9.9	10.7	11.0	11.1	11.4	11.7	12.0	-49.2	22.6	15.9	8.0	9.8	11.3
14. Net Interest	477.2	478.4	481.0	486.3	497.3	508.9	519.9	530.3	540.8	549.6	17.3	5.4	8.1	460.8	485.8	525.0
15. Corporate Profits(adj)	285.9	286.7	295.4	310.0	317.7	328.4	324.1	3[illegible].9	317.6	322.3	-8.3	0.4	7.5	301.3	302.5	325.3
16. National Income	4344.0	4430.9	4494.5	4575.4	4655.4	4750.9	4816.3	4894.2	4950.0	5042.5	7.4	6.4	6.9	4266.5	4539.1	4852.9
17. Indirect Business Tax	425.2	433.1	438.7	446.0	453.3	461.6	469.7	476.9	482.9	491.9	6.0	6.2	6.8	417.0	442.8	472.8
18. Capital Consumption Adj	24.7	25.4	27.5	29.3	31.6	33.9	35.8	38.2	41.3	43.4				13.2	28.5	37.3
19. Capital Cons. Allowance	545.4	536.6	538.8	541.2	543.9	546.4	549.3	552.6	556.0	559.5	2.4	0.2	2.0	539.1	540.1	551.1
20. Business Transfers	32.9	33.6	34.3	35.0	35.8	36.5	37.3	38.1	39.0	39.9	9.6	8.9	8.8	31.9	34.7	37.7
21. Net Govt Subsidies	-2.2	-9.7	-8.1	-3.6	-11.9	-12.2	-6.0	-5.3	-4.4	-5.8	-50.0	-9.8	-16.2	-9.2	-8.3	-7.0
22. Statistical Descrepancy	-23.7	-8.7	0.0	-1.6	-7.4	-11.4	-12.2	-21.1	-11.4	-25.3				-19.7	-4.4	-14.0
23. Gross National Product	5340.2	5441.2	5525.7	5621.7	5700.7	5805.7	5890.2	5973.6	6053.4	6146.1	7.2	6.5	6.3	5234.0	5572.3	5921.7

Table 4.

Derivation of U. S. Personal Income
for 1989-IV and 1990-I with Forecasts for 1990-II through 1992-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	89/88	90/89	91/90	1989	1990	1991
1. National Income	4344.0	4430.9	4494.5	4575.4	4655.4	4750.9	4816.3	4894.2	4950.0	5042.5	7.4	6.4	6.9	4266.5	4539.1	4852.9
Less:																
2. Adj. Corporate Profits	285.9	286.7	295.4	310.0	317.7	328.4	324.1	330.9	317.6	322.3	-8.3	0.4	7.5	301.3	302.5	325.3
3. Social Insurance	488.6	504.7	509.7	516.2	523.0	541.0	548.5	555.6	562.9	582.6	7.8	7.1	7.5	479.2	513.4	552.0
Plus:																
4. Government Transfers	616.8	637.5	643.7	651.7	661.7	681.7	690.6	698.8	709.1	729.6	8.1	8.0	7.2	600.5	648.7	695.1
5. Social Security, etc	333.4	345.6	348.7	352.2	357.0	369.8	374.5	378.8	383.3	396.4	8.3	7.9	7.3	325.3	350.9	376.6
6. Unemployment Benefits	15.0	15.8	15.9	16.1	16.8	17.2	17.3	17.2	18.1	18.1	9.8	13.1	8.0	14.3	16.2	17.5
7. Veterans Benefits	16.9	17.8	17.8	17.7	17.6	18.2	18.1	18.1	18.0	18.3	2.2	2.3	2.1	17.3	17.7	18.1
8. Employees Retirement	90.1	93.6	95.0	96.2	97.5	100.7	102.3	103.4	104.5	107.8	7.0	8.0	7.5	88.5	95.6	102.7
9. A. F. D. C.	18.4	18.8	18.8	19.0	19.1	19.3	19.5	19.8	19.9	20.2	4.1	5.6	3.7	17.9	18.9	19.6
10. Other Govt Transfers	143.1	145.9	147.5	150.5	153.7	156.5	158.9	161.5	165.3	168.8	9.5	8.9	7.5	137.2	149.4	160.6
11. Business Transfers	32.9	33.6	34.3	35.0	35.8	36.5	37.3	38.1	39.0	39.9	9.6	8.9	8.8	31.9	34.7	37.7
12. Interest Transfers	200.4	206.0	209.5	210.8	214.3	217.6	221.8	224.1	227.9	231.3	10.3	6.9	6.0	196.6	210.2	222.9
13. Personal Dividends	115.7	118.0	120.3	122.8	125.3	128.0	130.9	134.0	137.2	140.3	10.1	8.2	9.0	112.4	121.6	132.5
Equals:																
14. Personal Income	4535.3	4634.7	4697.2	4769.5	4851.9	4944.0	5017.8	5102.7	5182.8	5278.7	8.9	7.0	6.8	4427.3	4738.3	5061.8
Less:																
15. Personal Tax Payments	664.1	673.5	687.1	695.2	711.6	720.1	736.3	746.8	761.4	770.2	10.5	6.7	7.1	648.5	691.9	741.2
Equals:																
16. Personal Disposable Inc	3871.3	3961.2	4010.1	4074.3	4140.3	4223.9	4281.5	4355.9	4421.4	4508.5	8.7	7.1	6.8	3778.8	4046.5	4320.7
Less:																
17. Personal Consumption	3550.6	3639.2	3688.6	3755.0	3812.7	3884.4	3952.1	4015.2	4069.4	4143.1	7.3	7.3	6.9	3471.1	3723.9	3980.3
18. Other Outlays	104.6	106.5	107.3	108.8	110.0	111.7	112.9	114.6	116.0	117.7	5.5	4.6	5.2	103.4	108.2	113.8
Equals:																
19. Personal Savings	216.0	215.5	214.2	210.5	217.6	227.8	216.5	226.1	236.0	247.7	41.2	4.9	5.7	204.4	214.5	226.6
20. Savings Rate(%, AR)	5.6	5.4	5.3	5.2	5.3	5.4	5.1	5.2	5.3	5.5	29.9	-2.3	-0.9	5.4	5.3	5.3

Table 5.

U. S. Federal Government Activity
for 1989-IV and 1990-I with Forecasts for 1990-II through 1992-i

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	89/88	90/89	91/90	1989	1990	1991
1. Government Receipts	1056.1	1086.9	1104.0	1119.7	1143.1	1172.8	1191.5	1206.5	1219.7	1250.0	7.7	6.3	7.6	1047.2	1113.4	1197.6
2. Personal Tax & Nontax	470.8	478.0	487.1	491.4	503.9	510.6	521.6	527.6	538.8	545.4	11.5	6.4	7.0	460.5	490.1	524.7
3. Corporate Profits Tax	95.4	102.9	106.1	111.9	115.2	120.4	120.7	123.6	118.7	122.6	-5.3	3.3	10.8	105.5	109.0	120.9
4. Indirect Business Tax	59.3	60.3	61.0	61.5	63.3	64.1	65.2	65.6	66.4	67.7	3.5	4.8	6.2	58.7	61.5	65.3
5. Social Security Contr	430.6	445.7	449.8	454.9	460.7	477.7	484.0	489.7	495.8	514.3	8.0	7.2	7.5	422.5	452.8	486.8
6. Government Expenditures	1212.6	1250.9	1267.6	1273.6	1305.4	1329.6	1336.7	1337.1	1373.2	1400.0	6.9	6.6	5.5	1195.7	1274.4	1344.2
7. Purchases of Goods and Services	405.1	412.8	420.2	417.7	423.2	426.3	425.2	424.1	432.8	437.1	5.8	3.8	2.1	403.2	418.5	427.1
8. Defense	300.9	309.0	307.4	307.1	305.6	309.6	307.6	307.8	305.4	307.7	1.4	1.7	0.1	302.2	307.3	307.6
9. Durables	78.1	81.0	80.5	80.7	80.2	79.6	79.2	79.7	78.9	78.4	-2.3	-1.7	-1.6	82.0	80.6	79.4
10. Nondurables	10.8	10.4	10.1	10.3	10.0	10.1	9.8	9.9	10.1	10.1	1.6	-7.9	-2.2	11.1	10.2	10.0
11. Military Payroll	79.6	82.6	81.6	81.3	80.7	83.6	83.1	82.1	80.8	83.1	4.2	2.9	1.0	79.3	81.6	82.4
12. Civilian Payroll	41.0	42.1	42.0	42.1	42.3	43.5	43.7	44.0	44.0	45.0	8.8	3.9	4.0	40.5	42.1	43.8
13. Other Services	85.1	86.2	86.7	86.4	86.0	86.2	85.3	85.9	85.5	85.2	0.0	4.2	-0.7	82.9	86.3	85.7
14. Structures	6.3	6.7	6.5	6.3	6.4	6.6	6.5	6.2	6.1	5.9	-8.9	0.8	-1.9	6.4	6.5	6.4
15. Nondefense	104.2	103.7	112.8	110.6	117.6	116.7	117.6	116.3	127.4	129.4	21.3	10.0	7.5	101.1	111.2	119.5
16. Durables	5.0	5.5	5.4	5.6	5.7	5.9	5.8	5.8	6.0	6.1	10.3	8.8	5.9	5.1	5.6	5.9
17. Nondurables	4.9	-0.4	3.0	1.1	7.8	3.9	2.9	0.6	9.4	7.6				2.9	2.9	4.2
18. CCC Inventory Chg	-1.4	-6.9	-3.5	-5.6	1.2	-2.9	-3.8	-6.4	2.2	0.3				-4.1	-3.7	-2.7
19. Other Nondurables	6.3	6.5	6.5	6.7	6.6	6.8	6.7	7.0	7.2	7.3	-6.8	-4.7	5.3	6.9	6.6	6.9
20. Compensation	50.5	53.3	57.8	57.0	55.7	57.3	57.8	58.3	58.7	61.0	8.2	12.2	3.7	49.9	56.0	58.0
21. Other Services	35.8	37.5	38.8	39.1	40.4	41.5	42.8	43.4	45.0	46.3	6.4	7.9	10.8	36.1	39.0	43.2
22. Structures	8.0	7.9	7.8	7.8	8.0	8.1	8.3	8.2	8.3	8.4	4.0	10.5	4.4	7.1	7.9	8.2
23. Transfer Payments	488.1	501.6	504.8	512.6	522.6	535.6	541.3	548.8	559.2	572.5	7.9	8.0	7.0	472.8	510.4	546.2
24. Grants-In-Aid to State and Local Govt	122.1	125.5	128.1	130.8	133.5	135.9	138.8	140.3	142.5	145.7	7.2	8.5	7.6	119.4	129.5	139.4
25. Net Interest Paid	174.8	179.9	184.3	186.2	190.7	194.9	199.9	203.0	207.3	211.1	13.1	8.2	8.6	171.3	185.3	201.3
26. Deficit of Government Enterprises	22.6	31.1	30.2	26.3	35.4	36.9	31.5	20.9	31.4	33.6	-19.0	5.6	-1.9	29.1	30.8	30.2
27. Federal Surplus	-156.5	-164.0	-163.6	-153.9	-162.3	-156.8	-145.2	-130.6	-153.5	-150.0				-148.5	-161.0	-146.5
28. State and Local Surplus	34.7	34.3	38.2	45.2	48.2	52.7	57.9	63.1	61.5	65.5				44.0	41.5	58.8
29. Total Government Surplus	-121.8	-129.7	-125.4	-108.7	-114.1	-104.1	-87.3	-67.5	-92.0	-84.5				-104.6	-119.5	-87.7
30. Federal Debt held by Individuals	1988.2	2040.2	2061.7	2093.0	2135.9	2185.2	2205.0	2230.5	2269.1	2314.4	7.3	4.8	6.7	1988.2	2082.7	2222.5

Table 6.

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1990

Selected Economic Variables in the U. S. Economy
for 1989-IV and 1990-I with Forecasts for 1990-II through 1992-I

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	89/88	90/89	91/90	1989	1990	1991
PRICES																
1. Consumer Price Index	125.9	128.0	129.5	130.8	132.3	133.8	135.7	137.3	139.1	140.7	4.8	5.0	4.9	124.0	130.2	136.5
2. % Change (AR)	3.9	7.1	4.7	4.1	4.7	4.6	5.8	4.8	5.3	4.7						
3. PPI - Indust. Commodities	112.3	113.7	113.5	114.0	114.9	116.1	117.0	117.6	118.7	119.8	5.0	2.2	2.9	111.6	114.0	117.4
4. % Change (AR)	1.7	5.0	-0.6	1.8	3.2	4.2	3.1	2.1	3.8	3.8						
5. PPI - Finished Goods	115.0	117.4	118.7	119.6	120.9	122.6	124.3	125.4	127.0	128.7	5.1	4.9	4.8	113.5	119.1	124.8
6. % Change (AR)	4.8	8.5	4.6	3.1	4.4	5.7	5.7	3.6	5.2	5.5						
CORPORATE ECONOMY																
7. After Tax Profits	156.7	155.1	158.8	167.1	175.3	181.7	182.3	185.7	178.2	182.0	-4.7	1.9	10.9	161.0	164.1	182.0
8. Inventory Profits	-9.7	-12.6	-10.5	-10.7	-14.1	-15.1	-19.4	-18.4	-16.2	-19.4				-18.7	-12.0	-17.3
9. Genuine Profits	169.0	160.5	165.2	172.4	176.0	180.4	175.8	178.9	172.2	172.1	-10.0	-1.8	4.9	171.6	168.5	176.8
10. Dow-Jones Index - Mean Closing	2687.7	2664.5	2665.9	2773.4	2598.4	2816.3	2611.4	2517.5	2418.9	2584.6	21.7	6.6	-3.2	2508.9	2675.6	2591.0
11. New York Composite Index - Mean Closing	191.22	185.59	182.63	189.65	180.56	187.73	180.12	176.43	171.92	178.46	20.1	2.5	-3.0	180.02	184.61	179.05
FINANCIAL																
12. Monetary Base	294.3	300.3	305.3	309.9	315.1	320.1	324.8	329.6	334.5	339.7	4.3	5.8	6.4	290.7	307.7	327.3
13. Checkable Deposits	570.0	573.6	578.6	583.5	595.1	603.9	611.6	619.4	629.1	637.3	-0.8	2.9	5.7	566.2	582.7	616.0
14. M1	790.8	800.2	810.3	819.7	835.6	849.2	861.7	873.8	887.4	900.2	1.0	4.2	6.3	783.7	816.4	868.0
15. Velocity of M1	6.698	6.754	6.774	6.810	6.772	6.786	6.785	6.745	6.772	6.779	6.2	2.2	-0.1	6.633	6.777	6.772
16. M2	3200.7	3250.3	3289.7	3337.2	3402.8	3464.9	3517.4	3573.2	3633.3	3694.4	3.7	6.1	6.8	3129.5	3320.0	3547.2
17. Velocity of M2	1.655	1.663	1.668	1.673	1.663	1.663	1.662	1.649	1.654	1.652	3.4	0.3	-0.6	1.661	1.667	1.657
INTEREST RATES																
18. Federal Funds Rate	8.61	8.25	8.29	8.26	8.53	8.71	8.98	9.15	9.23	9.07	21.8	-9.6	8.2	9.22	8.33	9.02
19. Prime Rate	10.50	10.04	10.00	10.00	10.27	10.50	11.06	11.50	11.50	11.21	16.7	-7.3	10.6	10.87	10.08	11.14
20. 3 Month Treasury Bill	7.65	7.76	7.72	7.61	8.01	8.21	8.43	8.69	8.84	8.58	21.7	-4.2	9.9	8.11	7.77	8.54
21. 6 Month Treasury Bill	7.51	7.70	7.73	7.82	8.13	8.29	8.51	8.60	8.71	8.52	16.2	-2.3	8.7	8.03	7.85	8.53
22. 1 Year Treasury Bond	7.83	8.13	8.41	8.26	8.59	8.78	9.13	9.20	9.06	8.63	11.5	-2.2	8.3	8.54	8.35	9.04
23. 7 Year Treasury Bond	7.91	8.44	8.74	8.59	8.73	8.96	9.35	9.39	9.15	8.85	-2.2	1.2	6.8	8.52	8.63	9.21
24. 30 Year Treasury Bond	7.93	8.44	8.80	8.55	8.92	9.05	9.36	9.34	9.03	8.71	-5.7	2.7	6.0	8.45	8.68	9.20
25. Seasoned AAA Corps	8.89	9.19	9.46	9.32	9.58	9.94	10.25	10.35	10.11	9.83	-4.7	1.4	8.2	9.26	9.39	10.16
26. FHA Mortgage Rate	9.82	10.12	10.52	10.41	10.54	10.96	11.32	11.36	11.04	10.91	-0.1	0.7	7.4	10.32	10.40	11.17
ADDITIONAL INDICATORS																
27. Housing Starts	1348	1449	1312	1285	1308	1290	1317	1282	1294	1326	-7.0	-3.5	-3.2	1386	1338	1296
28. Single Family Starts	988	1089	997	976	984	973	989	965	969	984	-7.0	0.2	-3.7	1010	1012	974
29. Multiple Family Starts	360	359	315	309	324	317	328	317	325	342	-7.1	-13.2	-1.6	377	327	322
30. Unit Auto Sales	8.73	9.73	9.69	10.26	9.53	9.92	9.96	10.46	8.95	9.27	-6.7	-1.1	0.2	9.91	9.80	9.82
31. Industry Production Indx	108.1	108.0	109.1	109.9	110.0	110.6	111.7	112.3	112.0	112.0	2.6	1.1	2.2	108.1	109.3	111.7
32. Capacity Utilization	83.5	82.9	83.2	83.3	82.7	82.6	82.9	82.8	82.1	81.5	0.2	-1.4	-0.5	84.2	83.0	82.6

Table 7.

U. S. Foreign Trade Accounts
for 1989-IV and 1990-I with Forecasts for 1990-II through 1992-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	89/88	90/89	91/90	1989	1990	1991
MERCHANDISE TRADE (Not Seasonally Adjusted, Annual Rates)																
1. Merchandise Exports	373450	368116	383840	371905	389935	398990	417975	403380	423935	429140	13.5	3.9	8.6	364142	378449	411070
2. Food & Live Animals	29662	29458	29730	29560	30420	30320	30890	30420	31350	31070	12.5	0.2	3.2	29724	29792	30745
3. Beverages & Tobacco	6461	5572	5260	5345	6370	5560	5380	5460	6455	5710	21.1	2.3	1.4	5510	5637	5714
4. Crude Materials	27890	29047	28700	27650	29410	30960	30450	29680	31120	31950	7.2	6.5	6.4	26947	28702	30553
5. Mineral Fuels	11256	9916	9370	8990	10760	10530	9975	9620	11140	10920	20.5	-1.1	5.7	9865	9759	10316
6. Animal & Vegetable Oil	1218	1148	1110	1360	1250	1240	1210	1370	1260	1250	-7.1	-9.8	4.3	1350	1217	1270
7. Chemicals	34245	35931	38490	36590	35260	37420	41120	39620	38890	40850	13.0	0.2	7.4	36485	36568	39263
8. Manufactured Goods	27742	29818	31360	31690	32220	33710	35240	35020	36170	37640	19.3	14.8	12.0	27243	31272	35035
9. Machinery, Trnspt. Eq.	154074	161600	170230	163980	173490	173640	185160	176430	186980	185840	10.1	12.4	7.9	148800	167325	180553
10. Misc. Manufacturing	34020	35518	37940	37160	38010	40620	42970	42460	44270	45610	33.1	13.8	14.6	32638	37157	42580
11. Commodities, n.e.c.	31063	13223	14620	12620	14205	15520	15960	13750	15360	16430	11.6	-56.3	10.8	31249	13667	15148
12. Foreign Merchandise	15820	16885	17030	16960	18540	19470	19620	19550	20940	21870	15.8	21.1	14.6	14333	17354	19895
13. Merchandise Imports	487450	466234	475897	479374	498185	492410	512478	517161	532173	517415	7.3	1.4	7.0	473397	479923	513556
14. Food & Live Animals	20480	23597	22860	21960	23060	24630	23890	23030	24150	25560	2.9	10.6	4.6	20686	22869	23925
15. Beverages & Tobacco	5129	4223	4420	4550	5570	4660	4840	4960	5880	4990	5.4	7.5	8.4	4364	4691	5085
16. Crude Materials	14723	14332	15060	15960	17110	18540	18670	19650	20850	21160	14.7	1.6	24.4	15370	15615	19428
17. Mineral Fuels	54457	67971	59867	59064	59905	69270	70288	68326	70923	73825	28.1	17.2	13.0	52649	61702	69702
18. Animal & Vegetable Oil	804	702	720	740	770	760	780	795	800	780	-13.9	0.3	6.9	731	733	784
19. Chemicals	20615	21979	21520	20950	22210	23720	23350	23730	24890	25650	4.4	4.4	10.4	20752	21665	23923
20. Manufactured Goods	60064	56618	57490	57980	57270	57580	58430	58960	59470	60120	0.6	-7.5	2.2	61991	57339	58610
21. Machinery, Trnspt. Eq.	213123	187397	197360	190430	207510	195540	207350	200620	211430	197880	4.4	-4.9	4.1	205761	195674	203735
22. Misc. Manufacturing	81154	73891	79760	90420	85270	78850	84920	96630	91270	85560	8.8	7.4	6.8	76639	82335	87918
23. Commodities, n.e.c.	16901	15526	16840	17320	19510	18860	19960	20460	22510	21890	14.1	19.7	18.2	14453	17299	20448
FOREIGN TRANSACTIONS - GNP ACCOUNTS (Seasonally Adjusted, Annual Rates)																
24. Total Exports	643.5	646.7	650.4	665.7	677.9	697.4	713.3	724.6	737.7	749.8	14.3	5.5	8.8	625.9	660.2	718.3
25. Mdse Exports	374.4	382.6	379.8	386.9	392.9	406.0	415.0	418.4	426.9	434.1	14.6	4.5	8.0	368.9	385.6	416.6
26. Factor Income	145.0	139.4	143.7	148.2	153.6	158.5	163.1	167.4	170.8	173.9	17.3	6.8	12.8	136.9	146.2	165.0
27. Other Services	124.2	124.6	126.9	130.6	131.4	132.9	135.2	138.8	140.0	141.8	10.3	6.8	6.5	120.2	128.4	136.7
28. Total Imports	682.3	686.7	681.5	694.1	709.6	723.2	737.6	752.4	765.1	773.8	8.3	3.0	7.4	673.0	693.0	744.6
29. Mdse Imports	488.6	489.0	478.9	489.4	500.2	507.4	517.5	527.2	534.2	537.4	6.9	1.9	6.6	480.2	489.4	521.6
30. Factor Income	101.4	102.2	106.7	108.4	111.3	115.2	119.3	123.4	126.8	129.9	21.3	5.9	13.1	101.2	107.2	121.2
31. Other Services	92.2	95.5	95.9	96.3	98.1	100.6	100.8	101.8	104.1	106.5	3.2	5.3	5.6	91.6	96.5	101.8
32. Net Transfer Payments	19.6	15.9	15.3	18.4	21.1	16.7	16.1	18.3	21.0	16.9	4.4	14.8	2.0	15.4	17.7	18.0
33. Government Interest	33.8	34.0	35.2	36.3	37.6	39.0	40.4	41.8	43.0	44.2	15.7	6.3	14.7	33.7	35.8	41.1
34. Net Foreign Investment	-92.2	-90.0	-81.6	-83.1	-90.4	-81.5	-80.8	-87.9	-91.4	-85.1				-96.2	-86.3	-85.4
35. Trade Weighted Value of Dollar (3/73 = 100)	97.3	93.1	93.2	91.5	89.7	90.4	91.3	89.5	87.6	88.3	6.2	-6.7	-2.4	98.5	91.9	89.7

Table 8.

Personal Consumption Expenditure Implicit Price Deflators
for 1989-IV and 1990-I with Forecasts for 1990-II through 1992-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	89/88	90/89	91/90	1989	1990	1991
1. Durable Goods	111.7	112.8	113.0	113.7	114.2	115.0	115.4	116.1	116.7	117.5	1.1	1.9	2.1	111.3	113.4	115.8
2. Percent Change(AR)	1.1	3.9	0.9	2.4	1.8	2.9	1.4	2.4	2.3	2.5						
3. Automobiles	120.5	121.5	121.7	121.9	122.7	123.6	124.1	124.4	125.7	126.7	1.8	1.5	2.1	120.2	122.0	124.5
4. Percent Change(AR)	2.5	3.5	0.7	0.5	2.7	3.0	1.6	0.9	4.3	3.1						
5. Furniture	98.4	98.6	98.7	99.3	99.4	99.5	99.3	99.8	100.0	99.9	-0.3	1.0	0.6	98.0	99.0	99.6
6. Percent Change(AR)	1.6	1.1	-0.0	2.4	0.4	0.4	-0.9	2.0	0.9	-0.4						
7. Other Durables	123.7	126.9	127.9	128.8	129.9	131.6	133.1	134.4	136.3	138.1	4.3	5.0	4.2	122.3	128.4	133.8
8. Percent Change(AR)	2.8	11.0	3.1	2.9	3.5	5.2	4.5	4.0	5.9	5.3						
9. Nondurables	124.0	127.9	128.6	128.9	130.4	132.2	133.9	134.7	136.5	138.4	5.3	5.2	4.2	122.6	129.0	134.3
10. Percent Change(AR)	3.8	13.2	2.3	0.7	4.9	5.7	5.0	2.3	5.8	5.5						
11. Food	130.7	134.6	135.5	136.7	138.2	139.9	141.4	142.9	144.5	146.1	5.6	6.0	4.4	128.5	136.2	142.2
12. Percent Change(AR)	4.9	12.4	2.9	3.6	4.4	5.0	4.3	4.3	4.6	4.5						
13. Apparel	119.1	121.9	122.0	119.9	122.5	124.2	125.2	123.5	126.0	127.2	2.3	2.6	2.6	118.5	121.6	124.7
14. Percent Change(AR)	8.7	9.6	0.3	-6.6	8.9	5.7	3.2	-5.3	8.2	3.9						
15. Gasoline and Oil	85.0	89.6	90.3	88.6	88.1	90.1	92.8	93.1	94.5	97.3	9.3	3.2	3.9	86.4	89.4	92.6
16. Percent Change(AR)	-13.8	23.5	3.0	-7.3	-2.0	9.0	13.0	1.1	6.4	12.2						
17. Fuel Oil	83.3	95.4	89.6	89.8	92.5	95.4	97.0	97.1	100.0	105.1	5.0	13.9	6.1	80.6	91.8	97.4
18. Percent Change(AR)	14.1	72.2	-22.2	0.9	12.8	13.1	7.0	0.2	12.6	21.8						
19. Other Nondurables	140.7	142.0	143.5	145.0	146.8	148.7	150.5	152.4	154.5	156.4	5.8	4.6	5.0	137.9	144.3	151.5
20. Percent Change(AR)	5.7	3.6	4.4	4.4	4.9	5.4	4.9	5.1	5.6	5.1						
21. Services	143.4	145.5	147.2	148.9	150.8	152.8	154.8	156.7	158.8	161.0	4.6	4.9	5.2	141.2	148.1	155.7
22. Percent Change(AR)	4.4	6.0	4.7	4.8	5.2	5.4	5.3	5.0	5.6	5.6						
23. Housing	146.2	147.7	149.4	151.3	153.2	155.0	157.1	159.1	161.2	163.5	4.6	5.0	5.1	143.3	150.4	158.1
24. Percent Change(AR)	6.0	4.1	4.6	5.2	5.1	4.8	5.5	5.2	5.4	5.9						
25. Electricity and Gas	117.8	119.0	119.1	119.4	121.6	123.1	123.7	124.0	126.9	128.6	2.9	2.9	3.9	116.4	119.8	124.4
26. Percent Change(AR)	7.8	4.3	0.4	0.9	7.4	5.1	2.1	0.9	9.5	5.6						
27. Other Household Opns	130.9	132.7	134.0	135.1	136.1	137.1	138.9	140.1	141.2	142.4	1.9	3.2	3.6	130.3	134.5	139.3
28. Percent Change(AR)	2.0	5.4	4.1	3.2	3.3	3.0	5.3	3.3	3.3	3.4						
29. Transportation	128.9	133.8	134.9	135.9	137.2	139.3	141.0	142.8	145.0	147.1	3.2	5.1	4.8	128.9	135.4	142.0
30. Percent Change(AR)	1.9	16.1	3.6	2.9	3.8	6.4	4.8	5.2	6.3	6.0						
31. Medical Care	155.9	158.1	160.4	162.9	165.3	167.9	170.7	173.4	176.2	179.0	6.8	5.7	6.4	152.9	161.7	172.0
32. Percent Change(AR)	5.0	5.6	6.1	6.3	6.1	6.4	6.9	6.5	6.6	6.5						
33. Other Services	142.9	144.5	146.2	147.7	149.4	151.2	152.8	154.4	156.1	157.8	3.8	4.3	4.5	140.9	146.9	153.6
34. Percent Change(AR)	3.4	4.6	4.8	4.2	4.7	4.9	4.3	4.3	4.4	4.4						

Table 9.

Gross National Product Implicit Price Deflators
for 1989-IV and 1990-I with Forecasts for 1990-II through 1992-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	89/88	90/89	91/90	1989	1990	1991
1. Gross National Product	127.9	129.7	131.0	132.0	133.5	135.0	136.4	137.6	139.3	141.0	4.2	4.2	4.2	126.3	131.6	137.1
2. Percent Change(AR)	3.2	5.7	4.1	3.1	4.6	4.6	4.2	3.6	5.0	5.0						
3. Personal Consumption	131.8	134.3	135.5	136.5	138.2	139.9	141.6	142.9	144.9	146.7	4.4	4.7	4.6	130.0	136.1	142.3
4. Percent Change(AR)	4.4	7.8	3.6	3.0	5.1	5.0	4.9	3.7	5.7	5.1						
5. Consumer Price Index	125.9	128.0	129.5	130.8	132.3	133.8	135.7	137.3	139.1	140.7	4.8	5.0	4.9	124.0	130.2	136.5
6. Percent Change(AR)	3.9	7.1	4.7	4.1	4.7	4.6	5.8	4.8	5.3	4.7						
7. Private Domestic Invest	107.4	107.1	107.9	108.6	109.4	110.0	110.7	111.4	112.2	113.0	2.4	0.9	2.6	107.3	108.2	111.1
8. Percent Change(AR)	-0.6	-1.0	2.9	2.7	3.1	2.1	2.7	2.4	3.2	2.7						
9. Structures	121.7	123.3	124.4	125.5	126.5	127.3	128.3	129.3	130.3	131.2	5.2	3.4	3.1	120.8	124.9	128.8
10. Percent Change(AR)	0.7	5.4	3.6	3.6	3.2	2.6	3.2	3.2	3.1	2.8						
11. Producer's Durables	93.5	94.4	94.8	94.6	94.9	95.3	95.4	95.6	96.2	96.5	0.7	0.7	1.0	94.0	94.7	95.6
12. Percent Change(AR)	-1.7	3.9	1.7	-0.8	1.3	1.7	0.4	0.8	2.5	1.3						
13. Residential Structures	126.2	126.9	127.9	128.8	129.7	130.8	131.8	132.9	134.0	135.2	4.0	3.1	3.2	124.5	128.3	132.4
14. Percent Change(AR)	1.9	2.2	3.2	2.8	2.8	3.4	3.1	3.4	3.4	3.6						
15. Exports	106.1	106.4	107.3	108.1	109.0	110.1	111.1	111.9	112.9	113.8	2.9	1.4	3.5	106.3	107.7	111.5
16. Percent Change(AR)	0.4	1.1	3.4	3.0	3.4	4.1	3.7	2.9	3.6	3.2						
17. Imports	104.4	105.8	105.7	106.0	107.0	108.3	109.5	110.4	111.4	112.5	2.1	1.2	3.6	104.9	106.1	109.9
18. Percent Change(AR)	3.1	5.5	-0.4	1.1	3.8	4.9	4.5	3.3	3.7	4.0						
19. Federal	121.5	123.1	123.9	124.6	125.9	128.0	128.6	129.5	130.7	133.3	3.2	4.0	3.9	119.6	124.4	129.2
20. Percent Change(AR)	5.8	5.4	2.6	2.3	4.2	6.8	1.9	2.8	3.8	8.2						
21. Federal Purchases	113.8	113.4	113.9	114.9	117.3	117.7	118.4	119.9	122.2	123.3	1.9	3.4	4.1	111.1	114.9	119.6
22. Percent Change(AR)	9.4	-1.1	1.6	3.7	8.6	1.3	2.4	5.2	7.9	3.5						
23. Federal Value Added	134.1	138.8	140.1	140.1	139.8	144.5	144.8	144.6	144.4	149.4	5.1	4.5	3.5	133.7	139.7	144.6
24. Percent Change(AR)	0.6	14.8	3.8	0.0	-0.9	14.1	0.8	-0.6	-0.6	14.6						
25. State & Local	136.9	138.9	140.6	142.2	143.9	145.6	147.3	149.0	151.0	152.8	4.8	4.8	4.8	135.0	141.4	148.2
26. Percent Change(AR)	3.9	6.0	5.0	4.6	4.9	4.8	4.8	4.7	5.5	4.9						
27. State/Local Purchases	123.9	126.0	127.2	128.5	129.8	131.3	132.8	134.3	136.0	137.7	4.4	4.3	4.5	122.6	127.9	133.6
28. Percent Change(AR)	3.6	6.8	3.8	4.3	4.1	4.6	4.8	4.5	5.1	5.0						
29. State/Local Value Added	148.1	150.1	152.1	153.9	156.0	157.9	159.7	161.7	163.9	165.8	5.3	5.3	5.1	145.4	153.0	160.8
30. Percent Change(AR)	5.0	5.5	5.4	4.8	5.6	5.0	4.6	5.1	5.6	4.7						

Table 10.

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1990

Details of Private Consumption in the U. S.
for 1989-IV and 1990-I with Forecasts for 1990-II through 1992-I

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	89/88	90/89	91/90	1989	1990	1991
Current Dollars																
1. Durable Goods	469.5	492.9	493.8	504.3	500.3	507.9	511.7	520.7	507.5	515.8	4.0	5.2	2.8	473.3	497.8	512.0
2. Autos, Trucks & Parts	205.3	221.4	221.9	231.2	225.9	234.0	236.3	245.3	227.8	235.0	1.1	5.2	4.8	213.9	225.1	235.9
3. Furniture	174.8	182.3	181.6	181.5	181.1	180.2	180.0	179.6	181.3	181.4	7.2	4.6	-0.7	173.6	181.6	180.3
4. Other	89.4	89.1	90.3	91.6	93.3	93.7	95.4	95.8	98.4	99.4	5.1	6.1	5.2	85.8	91.1	95.8
5. Nondurable Goods	1142.4	1166.9	1173.4	1186.5	1201.8	1222.6	1242.6	1254.4	1273.3	1292.4	6.8	5.2	5.6	1123.4	1182.2	1248.2
6. Food	601.8	615.6	619.4	627.5	635.3	646.2	655.5	663.6	671.9	680.2	6.3	5.0	5.6	594.9	624.5	659.3
7. Clothing & Shoes	204.3	208.2	208.0	208.9	211.3	213.5	216.7	215.4	217.8	220.4	7.1	4.5	3.2	200.1	209.1	215.9
8. Gasoline & Oil	83.2	85.2	85.3	84.5	84.7	86.9	89.6	90.3	91.9	94.3	9.3	1.2	5.6	84.0	85.2	89.7
9. Fuel Oil & Coal	23.4	20.7	19.8	21.1	22.3	22.9	23.0	23.3	24.3	24.9	4.6	2.8	11.4	20.4	21.0	23.4
10. Other	229.6	237.2	240.9	244.5	248.2	253.1	257.8	261.8	267.4	272.6	7.0	8.3	7.1	224.1	242.7	260.0
11. Services	1938.7	1979.5	2021.4	2064.2	2110.6	2153.9	2197.8	2240.1	2288.6	2334.9	8.5	9.0	8.6	1874.4	2043.9	2220.1
12. Housing	549.8	558.5	568.0	578.4	588.7	598.9	610.3	621.4	633.0	645.5	6.5	7.4	7.4	534.0	573.4	615.9
13. Utilities	100.8	93.9	96.5	97.8	100.3	101.8	103.2	103.8	107.7	108.8	2.1	1.5	7.2	95.6	97.1	104.1
14. Other	110.9	112.5	113.9	115.2	116.4	117.8	119.2	120.6	122.0	123.6	4.6	5.3	4.7	108.7	114.5	119.9
15. Transportation	129.5	134.7	136.7	139.3	142.8	145.6	148.3	150.9	154.4	157.4	7.3	9.3	8.3	126.6	138.4	149.8
16. Medical Care	474.6	491.4	505.3	521.1	537.6	553.2	569.1	585.2	601.9	618.9	13.7	13.5	12.4	452.8	513.9	577.4
17. Other	573.1	588.5	601.0	612.4	624.8	636.6	647.7	658.2	669.6	680.7	8.7	9.0	7.6	556.7	606.7	653.0
Constant Dollars																
18. Durable Goods	420.3	437.1	436.9	443.6	438.1	441.6	443.4	448.5	434.7	439.1	2.8	3.2	0.7	425.2	438.9	442.1
19. Autos, Trucks & Parts	170.4	182.2	182.3	189.7	184.1	189.3	190.4	197.2	181.2	185.5	-0.7	3.7	2.7	178.0	184.6	189.5
20. Furniture	177.6	184.7	184.0	182.8	182.2	181.1	181.3	180.0	181.3	181.6	7.5	3.6	-1.4	177.1	183.4	180.9
21. Other	72.3	70.2	70.6	71.1	71.8	71.2	71.7	71.3	72.2	72.0	0.8	1.1	1.0	70.2	70.9	71.6
22. Nondurable Goods	921.1	912.2	912.1	920.7	921.5	924.5	928.2	931.6	932.5	933.8	1.3	-0.0	1.4	916.7	916.6	929.2
23. Food	460.5	457.5	457.1	459.0	459.7	461.9	463.6	464.4	465.0	465.6	0.6	-1.0	1.2	462.8	458.3	463.7
24. Clothing & Shoes	171.5	170.8	170.5	174.2	172.5	171.9	173.1	174.4	172.9	173.3	4.7	1.8	0.6	168.9	172.0	173.1
25. Gasoline & Oil	97.9	95.1	94.5	95.4	96.1	96.5	96.5	97.0	97.2	96.9	0.0	-1.9	1.6	97.2	95.3	96.8
26. Fuel Oil & Coal	28.1	21.7	22,1	23.5	24.1	24.0	23.7	24.0	24.3	23.7	-0.4	-9.7	5.0	25.3	22.9	24.0
27. Other	163.2	167.1	167.9	168.6	169.1	170.2	171.3	171.8	173.1	174.3	1.2	3.5	2.0	162.5	168.2	171.6
28. Services	1352.2	1360.7	1373.6	1386.5	1399.8	1410.0	1420.2	1429.9	1441.1	1450.4	3.7	4.0	3.3	1327.7	1380.2	1425.3
29. Housing	376.0	378.1	380.2	382.3	384.3	386.4	388.5	390.6	392.7	394.8	1.8	2.3	2.2	372.7	381.2	389.6
30. Utilities	85.6	78.9	81.0	81.9	82.5	82.7	83.4	83.7	84.9	84.6	-0.8	-1.3	3.2	82.2	81.1	83.7
31. Other	84.7	84.8	85.0	85.3	85.5	85.9	85.8	86.1	86.4	86.8	2.6	2.0	1.1	83.5	85.2	86.1
32. Transportation	100.5	100.7	101.3	102.5	104.1	104.5	105.2	105.7	106.5	107.0	3.9	4.0	3.3	98.2	102.2	105.5
33. Medical Care	304.4	310.9	315.0	319.9	325.2	329.5	333.4	337.5	341.6	345.8	6.5	7.3	5.6	296.2	317.8	335.5
34. Other	401.1	407.3	411.1	414.6	418.2	421.0	423.9	426.3	429.0	431.4	4.7	4.5	3.0	395.0	412.8	425.1

Table 11. (corrected 5-16-90)

Productivity and Employment in the U. S. Economy
for 1989-IV and 1990-I with Forecasts for 1990-II through 1992-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	89/88	90/89	91/90	1989	1990	1991
PRODUCTIVITY																
1. Private Domestic Wage Component - %Chg(AR)	6.2	3.8	5.7	5.7	5.8	5.8	5.8	5.8	5.9	6.0	--	--	--	5.5	5.3	5.8
2. Private Productivity % Change(AR)	-0.8	0.0	2.0	2.5	0.2	1.2	-0.1	0.5	-0.5	-0.6	--	--	--	0.3	0.7	0.8
3. Implicit Unit Labor Cost % Change(AR)	7.0	3.8	3.6	3.2	5.6	4.6	5.9	5.2	6.4	6.6	--	--	--	5.1	4.5	5.0
4. Private Domestic Price Deflator - %Chg(AR)	3.4	5.3	4.0	3.1	4.7	4.2	4.3	3.7	5.3	4.7	--	--	--	4.0	4.1	4.2
EMPLOYMENT																
5. Civilian Employment	117770	118077	118303	118750	119015	119435	119955	120538	120910	121383	2.0	1.0	1.4	117326	118536	120210
6. Private Employment	91550	92191	92371	92772	93081	93543	94020	94444	94758	95226	2.8	1.9	1.7	90856	92604	94191
7. Manufacturing Employment	19514	19410	19415	19461	19407	19410	19420	19454	19375	19407	1.0	-1.0	-0.0	19613	19423	19415
8. Durable Manufacturing	11435	11356	11360	11401	11351	11359	11366	11389	11307	11337	0.8	-1.5	-0.1	11537	11367	11355
9. Nondurable Mfg	8079	8054	8055	8060	8056	8051	8054	8065	8068	8070	1.3	-0.2	0.0	8076	8056	8060
10. Mining	736	748	761	764	775	783	792	799	800	806	-0.4	6.1	4.1	718	762	794
11. Contract Construction	5331	5445	5317	5251	5219	5224	5235	5216	5191	5224	2.9	0.2	-1.7	5299	5308	5217
12. Transport & Communication	5772	5860	5870	5888	5904	5935	5946	5968	5965	5967	2.6	3.1	1.2	5705	5880	5954
13. Transportation	3590	3645	3650	3665	3677	3704	3712	3730	3724	3722	5.1	4.1	1.6	3515	3659	3718
14. Communication	2182	2214	2220	2223	2227	2231	2234	2238	2241	2245	-1.0	1.4	0.7	2191	2221	2236
15. Trade	26010	26134	26185	26338	26473	26631	26786	26941	27043	27168	2.3	1.8	2.2	25811	26282	26850
16. Retail Trade	19714	19798	19833	19951	20048	20168	20289	20411	20479	20568	2.0	1.7	2.2	19576	19908	20337
17. General Merchandise	2480	2467	2450	2470	2481	2496	2511	2523	2522	2531	-0.7	-0.7	1.9	2484	2467	2513
18. Food	3332	3361	3383	3398	3420	3438	3455	3472	3489	3507	5.2	3.7	2.2	3269	3391	3464
19. Automobiles	2167	2171	2168	2171	2173	2174	2175	2180	2180	2181	3.3	0.6	0.3	2157	2171	2177
20. Eating	6417	6469	6507	6551	6593	6638	6674	6713	6748	6783	1.5	2.5	2.5	6369	6530	6693
21. Other	5317	5330	5325	5361	5381	5422	5474	5523	5540	5566	1.5	1.0	2.6	5297	5349	5490
22. Wholesale Trade	6296	6336	6352	6387	6425	6463	6497	6530	6564	6600	3.4	2.2	2.2	6235	6375	6514
23. Durable	3735	3758	3769	3786	3815	3845	3872	3898	3924	3951	3.8	2.3	2.7	3696	3782	3885
24. Nondurable	2562	2577	2583	2601	2610	2618	2625	2632	2640	2649	2.8	2.1	1.4	2539	2593	2629
25. Finance, Insurance and Real Estate	6869	6913	6929	6948	6969	7000	7034	7064	7093	7135	2.2	1.8	1.6	6814	6940	7048
26. Services	27317	27683	27894	28122	28334	28560	28807	29002	29291	29519	5.1	4.1	3.2	26892	28008	28915
27. Government	17848	18023	18284	18270	18244	18260	18300	18353	18407	18442	1.6	2.7	0.7	17728	18205	18330
28. Federal	2980	3031	3203	3142	3061	3043	3040	3053	3047	3042	0.7	4.1	-2.0	2988	3109	3046
29. State & Local	14868	14992	15081	15128	15183	15217	15260	15300	15360	15400	1.8	2.4	1.2	14740	15096	15284
30. Total Payroll	109398	110214	110655	111042	111325	111803	112320	112797	113165	113668	2.6	2.0	1.5	108584	110809	112521
31. Unemployment Rate	5.3	5.3	5.4	5.4	5.5	5.5	5.5	5.5	5.6	5.6	-14.9	2.4	2.5	5.3	5.4	5.5

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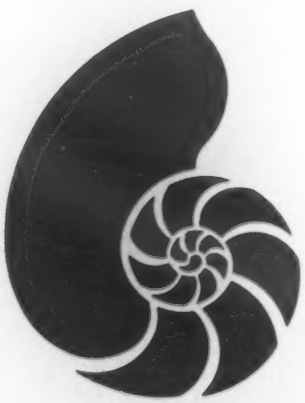
FORECAST OF THE NATION

1990 III-1992 II

GEORGIA STATE UNIVERSITY
COLLEGE OF BUSINESS ADMINISTRATION

August 1990

Dr. Donald Ratajczak, Director



ECONOMIC FORECASTING CENTER

PERSIAN GULF CRISIS SENDS U.S. ECONOMY INTO RECESSION

Dr. Donald Ratajczak
Director
Economic Forecasting Center

SUMMARY

Forecasting will never be an exact science, but never has uncertainty been more substantial than during the past few weeks. Within days of the Iraq invasion of Kuwait, we changed our worldwide oil availability assumptions from losing several hundred thousand barrels a day after hostilities cease to losing more than 4.4 million from the boycott to losing 1.5 million barrels daily as Saudi Arabia, Venezuela, Iran and other producers make up the bulk of the lost oil through the Iraq boycott. Also, fears of continued conflict raise the likelihood that some oil facilities may be incapacitated by conflict. As more than 10 million barrels per day are at risk, or more than 20% of the world supply of oil a substantial risk premium currently is being charged for oil. As a result, oil prices have increased significantly. All that is certain is that oil supplies will be less and oil prices will be higher than before the Persian Gulf crisis. Thus, inflation in the United States over the next six months will be higher and economic activity will be lower than before the conflict.

What makes the outlook so troubling is that the economy was approaching a recession even before the Persian Gulf uncertainties appeared. The three year revision of GNP showed a substantial downward revision in wage income for the latter half of 1989. The service economy also was revised downward by $57 billion in current dollars for the first quarter of 1990. Lower capacity to consume and less growth in the lower volatility service sector substantially raised the specter of recession.

Then, the second quarter GNP report showed gains only in inventories and government activity. Some of those government purchases were gains in commodity crops and will not be sustained. Other government activities represented the Census activity, which already is subsiding in the summer. Excluding those two events, real economic activity excluding inventory accumulations fell 2.5%. Inventories are not yet excessive, but another quarter of such inventory heavy activity will require substantial production corrections.

After autos finish their inventory accumulations in the summer, production for inventory purposes will subside. Unless other expenditures surface, and building permits and orders for manufactured goods suggest that investment and construction spending will not provide any growth later this year, then a recession will begin.

Even after the GNP revisions, enough consumer and trade activity was expected to barely keep the economy out of recession. Then rising oil prices further diminished consumer purchasing power. As a result, a recession probably started in July (although that slight decline in payroll employment would not qualify as a recession without the further weakness from the Persian Gulf crisis. Thus, in a paradox, the recession probably started before the oil crisis, but the oil crisis was the deciding factor in tilting the economy into recession.)

At any rate, based upon our assumption of a 1.5 million barrel oil shortfall worldwide, the economy now is projected to show three consecutive quarters of decline beginning in the fall quarter (but the recession still could have begun with the decline of payroll employment in July). Moderating inflationary pressures during the summer of 1991 should provide enough purchasing power to snap the economy out of this decline. Even so, inflation adjusted GNP will increase only 1.1% this year and a recessionary 0.5% for next year.

Consumer prices are expected to rise 5.2% this year and a still strong 5.1% next year. However, the surge in oil prices should be followed by oil price moderation and a lessening of inflationary pressures for the second half of 1991. As measured by the GNP deflator, prices should rise 4.3% this year and 4.7% next year.

Long-term interest rates should rise with oil prices. For example, fixed mortgage rates should average 10.28% this year and a still high 10.12% next year. However, mortgage rates should again fall below 10% late in 1991. Short-term interest rates should fall faster, as the Federal Reserve is expected to shift policy toward restraining the recession. The prime rate should fall to 9.5% by the end of this summer and decline to 8.5% by next summer. Federal funds rates should decline by 1.25 percentage points from current levels during the next twelve months. Modest increases in short-term rates then are likely late in 1991 as the economy begins recovering from the mild recession.

After reaching 3000 on the Dow Jones index, stock prices are expected to fall to 2400 by next winter. Any further attempts to break 3000 are unlikely before the summer of 1992. Therefore, despite current inflationary fears, long term bonds may be better investments. However, so much uncertainty remains concerning the magnitude of the oil shock that a cautious, liquid investment portfolio seems preferable.

Unfortunately, simultaneous increases in inflation and decreases in economic activity are not good for housing or auto sales. Another dip below 10 million sales of autos is expected this fall. Sales are not expected to again exceed 10 million until 1992. Housing starts should remain near the 1.2 million of the second quarter until early in 1991. The rebound then expected should only be sufficient to raise the annual average for housing starts to 1.282 million from this year's 1.269 million.

And the outlook could be worse. Every million barrel, or 2%, shortfall of oil means a 12% increase in oil prices in the short-run. (The short-run price elasticity is between .15 and .2). A 1.5 million daily short-fall means $23 per barrel. (Prices currently are higher than that because of the substantial uncertainty that currently prevails.) Every $6 increase in oil prices per barrel means a 1% increase in the CPI during the ensuing six months. About half the increase in prices will be exhausted through reduced spending. Moreover, the economy is nonlinear. This means that the response for $12 per barrel probably are more than twice the $6 change.

Further compounding the uncertainty is the dynamics of recession itself. When the person up the street becomes unemployed and cannot easily find an alternative job, nearly everyone on the block reduces consumer spending. In a recession, financial institutions work on preserving current loan portfolios rather than adding loans. Preservation rather than expansion becomes the primary concern of most corporate boards. As a result, a temporary dip can feed upon these changed expectations, leading to a greater contraction than currently projected. Such shifting expectations are difficult to model, and may not be appropriately incorporated in our current projections. Therefore, the recession, which should raise unemployment by a full percentage point in the next year, could be more substantial than currently projected.

For these reasons, we believe a recession probably has already begun and that the projected 0.5% growth projected for next year could prove to be too strong if some of the oil and recessionary expectations uncertainties are more unfavorable than currently projected.

DATA REVISIONS

On the surface the annual three year revision in GNP accounts seemed normal. Although real growth was revised downward from 3.0% to 2.5% percent for 1989 while revisions were minor for earlier years, such changes hardly influence major outlook revisions. Moreover, the trade deficit was reduced by $10 billion for the first quarter of 1990 than previously estimated. Thus, the trade imbalances were not quite as bad as previously expected. On the income side, corporate profits were larger than originally reported while proprietors' income was substantially higher both for farm and nonfarm income (could this be the result of noncompliance checks on tax collections?) As interest income was revised downward slightly more than profits were raised, the returns to capital were smaller than originally projected, but not by enough to materially influence investment decisions.

The inflation rates remained in line with previous estimates. Also, inventory investment was little changed from earlier estimates. However, capital spending and housing expenditures had been sufficiently reduced during the previous three years to lower estimates of housing stock by nearly 2% and estimated capital stock by almost 3%. As the Federal Reserve already had adjusted capacity utilization upward, this was not a great surprise; although the adjustments suggested that less investment activity probably would be needed for replacement purposes in the next few quarters.

However, one important revision was the reduction in services consumption (and production). Of the $56 billion reduction in first quarter GNP, $57.1 billion was in consumer services. After inflation, medical and other services showed gains of only 2.4% and 3.0% in 1989 as compared with 6.5% and 4.7% in previous reports. Wages in the service sector were $47.6 billion lower than originally estimated for the first quarter. Because wages also were substantially overestimated for all other sectors, total wages were revised downward by $93.7 billion. (This suggests that a substantial downward revision in payroll employment is likely when the benchmark adjustments are revealed next month.)

The significance of these downward revisions in services and wage income is two-fold. First, the service economy is no longer growing at a satisfying and recession avoiding 3.7% in 1989, but at a much weaker 2.3%. With services growing below the economy's potential, only a small jar in goods activity could propel the economy into recession. Second, the downward revision in wage earnings meant that the consumer's capacity to spend was not as strong as originally thought. The savings rate was cut from 5.6% to 4.9% during the winter because of the revisions. This means that consumer spending could easily deteriorate from even the current anemic levels in an effort to rebuild household assets, if the appreciation of those assets stalls. With stocks, bonds, and housing all suffering some price deterioration, consumer spending restraint for the remainder of this year would certainly be possible even before the oil shock problems.

OUTLOOK

The data revisions showed that growth in the service economy was only 2/3 rds as rapid as previously believed and that that growth was slowing. Also, the consumer clearly had less capacity to maintain even the prevailing, reduced consumption path than originally projected. Thus, some slowing in consumer spending growth certainly was warranted.

Also, Federal Reserve restraint appears to have been more than intended. In 1989 the monetary base increased 4.3% while M2 gained 3.7%. To be sure, most of this slowing occurred during the first half of the year, when the Federal Reserve was fighting drought induced increases in inflationary expectations. The monetary base and M2 spurted during the first quarter as the winter freeze induced an increase in money demand and the Federal Reserve, by preserving its interest rate targets, allowed a rapid expansion of most monetary aggregates. However, continuation of a surprisingly strong gain in currency demand during the spring, even after price gains began subsiding, exhausted all the growth of the monetary base. The result has been an actual decline in M2, which persisted through July. Another spurt in money demand because of sharp increases in oil prices should again cause growth in the monetary aggregates, but much of this will be exhausted through increased currency demand (gasoline transactions require more currency than most other transactions). Thus, by pursuing an unchanged interest rate target while slowing inflation led to a temporary reduction in the demand for money, the Federal Reserve may have set the stage for a modest decline in activity even before the oil price surge.

Adding to financial restraint was the tightening credit criteria used by bank examiners. Although none of the monetary aggregates directly captures restraint caused by regulation, many small corporations complained that bank relationships were altered or additional credit was not as readily forthcoming because of bank concerns about loan classifications. In addition, many banks discovered that their loan collateral was not acceptable for some loans, leading to substantial reductions in bank earnings as these loans were reclassified. Some of these loans were still current when examiners required write-offs against earnings.

These financial restraints certainly led to weakness in construction, although the unusually mild winter assured that a more normal construction pattern would develop in the spring. Therefore, construction should not shed as much activity as the $11 billion in inflation adjusted spending on structures during the spring. With this regulatory restraint, however, some reduction in construction is certain during the summer and into the fall.

Also, some weakening in the growth of exports was expected in the spring following some catch-up shipments of aircraft following the Boeing strike. However, the dollar's decline, which led to a drop in earnings from abroad, was not expected. In addition, agricultural and chemical exports slowed. Further dollar weakness in Europe may lead to little earnings abroad during the summer, either, although strong prices for oil should be reflected in strong petroleum profits from abroad during the fall. The trade sector should continue to aid economic growth in the United States, but not by as much as previously expected. Also, higher oil prices will slow the economies of most of our trading partners, leading to smaller gains in foreign sales than originally expected.

Because the auto industry is again trying to entice customers by warning of large price increases in the fall, another surge of consumer spending for autos is expected this summer, followed by a fall slump in sales. Moreover, the industry is producing more cars this summer just in case current contract talks become stalled. Already, one strike has occurred in an important parts plant. This will create enough economic activity to cause the economy to growing in the summer when measured against the spring. However, weakness in the fall would be expected.

Also, the federal government will be completing its census. The result is a substantial reduction in employment from the 365,000 temporary workers who were hired by June. This reduced government spending, along with defense cutbacks assured little support from federal government spending in the next few quarters.

State and local governments also are facing a tax squeeze. Forty-two states were not able to reach their revenue projections according to one report. As a result, many states are simultaneously reducing spending growth and raising taxes. Thus, the government budgetary process should be mildly restraining economic expansion even before any budgetary restraint in order to reduce the deficit is pursued by the federal government.

Despite the Iraq conflict, some reduction still is expected in defense spending as strategic weapons and policy is reduced, even if conventional spending may be increased. Also, some tax increases remain likely, although higher gasoline prices have reduced the ardor of politicians for raising that tax. (If they showed any leadership, they would recognize that the current conflict indicates that some of our defense budget should be assigned to providing an adequate oil supply. Therefore, gasoline and petroleum based energy consumption has an external cost over and above the highway construction and maintenance and the environmental concerns that may be reflected in the prevailing taxes on oil products. Thus, the economic case for raising oil product taxes has never been stronger even if the political will has rarely been weaker. Are all our leaders in our history?) Thus, the structural deficit probably will be reduced, although the declining economy virtually assures that actual deficits will increase. Our forecast shows the actual deficit as measured by the national income accounts growing from $134 billion in 1989 to $163 billion in 1990 and $170 billion in 1991.

The Iraq conflict still cannot be adequately measured. Some oil has been lost because of the hostilities. Iraq and Kuwait oil, about 4.4 million barrels per day, have not flowed since a few days after the conflict began. Although Saudi Arabia, Venezuela and Iran all stated that they would increase production, that offset to the shortfall is not yet apparent. Oil has a very low short-run elasticity, because most procedures for reducing oil consumption require increased capital spending. This is especially true now that conservation has changed the heating and cooling relative to comfort zones. We estimate that the short-run price elasticity (the percentage price change for each percentage change in output) to be between .15 and .2. After capital spending for better insulation, different construction, alternative production procedures, alternative fuel development, and different fuel efficiencies for transportation equipment have been made, the elasticities rise to between .7 and .8. Thus, the highest price of oil occurs at the time of the oil dislocation. Then oil prices gradually fade, even if no more oil becomes available relative to prevailing quantities demanded. (Of course, as the world economy continues to grow, oil prices will grow because of increased quantities demanded.)

Every million barrel shortfall in world supplies means about a 2% reduction in oil. Based upon our short-term price elasticities, this would mean between a 15% and 20% increase in prices. Our relationships are nonlinear, and these prices could explode if the shortfall is truly great. However, most studies suggest that linear approximations are appropriate for shortfalls of less than 20%. Assuming that oil supplied will be 1.5 million less than previously anticipated at prevailing prices as a portion of the Iraq and Kuwait shortfall is offset by increased production elsewhere, prices should initially rise by 22.5% to 30% and then should begin drifting downward (about six to 8 quarters following the initial dislocation according to previous experience).

Such calculations suggest that oil should be selling between $20 and $22 in the Persian Gulf. Adding $1.50 for insurance, finance, and transportation costs means oil should be selling between $21.50 and $23.50 in the United States. Yet, oil has sold well over $26 per barrel. Does this mean the model is wrong? Of course not. Uncertainty is so great that greater disruptions are possible. If the Saudi oil fields come under attack, the shortfall could be 20%, at least temporarily. Although this remains an unlikely event, some risk premium must be assigned to oil to account for that event. Thus, the price of oil will be above $21 and could soar substantially higher based upon risks to further oil supplies normally delivered from the Persian Gulf. However, those risk premia will dissipate as tensions ease, if such a case develops.

As oil delivered to the United States sold at less than $16 in May, these price increases will substantially slow economic activity. Every $6 per barrel increase adds about 1% to the CPI for the next six months, and subtracts nearly half a percentage point from economic activity. Based upon our assumptions, the Iraq conflict will reduce economic activity by 0.5% next year and add 0.5% to consumer prices this year and again next year. However, higher oil prices do not increase inflation in the absence of changes in macroeconomic policies. Instead, the higher oil prices initially drift into higher chemical, plastics, transportation, and other oil derivative and oil using activities. This higher inflation raises interest rates and slows spending. The higher finance charges and reduced spending patterns, in turn, lead to reduced economic activity. After some time, about 4 to 6 quarters later according to recent experience, reduced economic activity leads to lower prices than otherwise would prevail. Thus, no inflation ultimately is generated by higher oil prices, but sluggish economic activity must be caused by the initial oil shock to insure this outcome. Anyone who believes that other prices will fall to offset the rise in oil prices without a recession simply has not been studying the American economy during recent oil shocks.

Of course, the above analysis raises a dilemma, because it indicates that current prices are not equilibrium prices. Therefore, rational investors and consumers, who presumably should respond to new equilibrium conditions will not be facing prices that contain all available information. How a rational economic agent behaves in an environment distorted by disequilibrium prices is an interesting question, for that is precisely the environment we are currently confronting. Thus, model uncertainty must be added to oil uncertainty in generating the current forecast.

Although the economy probably would not have been weak enough for long enough to qualify as a recession in the absence of the oil pricing shock, an actual decline in economic activity probably began in July. That was when payroll employment even after adjusting for the 165,000 census workers who were no longer needed, declined by 54,000. Manufacturing fell only by 7000, but such a dip in employment along with the spurt in unemployment from 5.2% to 5.5% certainly makes July a good candidate for the start of the recession. (Activity also appears to have fallen in April, but activity rebounded in May and June.) Thus, when the National Bureau of Economic Research gets around to dating the end of this long expansion, they may well say that the expansion lasted 93 months and the recession began in July.

Our current projections suggest that this will be one of the mildest recessions, with activity beginning a recovery sometime next spring. Employment should only decline by several hundred thousand from peak to trough and may already be trending upward before the bottom of the downturn. However, some of the reasons for such a mild outcome are: the anticipated short duration of the oil shock; the already recessionary levels of activity in construction, retailing, manufacturing, and financial services; consumer durable and apparel purchases that already are below trend rates of growth; and continued growth in the world economy. Of course, financial difficulties still could intensify, leading to further weakness than currently projected. Consumer sentiment also could deteriorate more rapidly than projected. However, the most likely condition is that our forecast a year from now will be trumpeting a mild recovery from a mild recession.

ASSUMPTIONS

Although energy assumptions remain the most volatile in this forecast, continued developments in Eastern Europe, decisions concerning the budget deficit, how state and local governments react to their difficult budgetary conditions, especially as they pay more for their energy needs, and how the Federal Reserve reacts to simultaneous signs of weakness and rising prices all must be considered.

Although the Iraqi conflict means more defense spending this year than originally projected, and 2% more in nominal terms than last year, defense still is expected to be trimmed substantially during the next two years. Military payrolls are expected to fall by 108,000 during the next two years. Construction for military facilities is projected to fall by 20%. Weapons procurement in the next two years should fall by 10% after adjustment for inflation. Most of the federal government expenditures and revenue assumptions are contained in table 5.

The budget deficit conference was expected to quietly leave town without significant changes. Some modest slowing in the growth of entitlements was assumed, as reflected in the transfer payments in table 4. Excise taxes also were assumed to rise, but the tax increases for energy products were not assumed to occur. Also, the transfer tax for financial transactions was not assumed to pass. As a result, the structural deficit was expected to be reduced by $20 billion from expenditures slowing, two-thirds from defense, and $10 billion from revenue enhancements. Unfortunately, a slowing economy will not allow these adjustments to reduce the actual deficit.

Although the Federal Reserve probably should ignore the impact of the oil shock, it probably will not. During the two previous negative shocks, the Federal Reserve tried to offset recession and actually accommodated inflation. This time, the Federal Reserve may avoid accommodating inflation, thus increasing the recessionary problems. In fact, the Federal Reserve should pursue policies that were appropriate before the oil shock. Those policies should be toward ease, as commodity inflation was subsiding even as recession was looming even before oil prices spurted. We assumed that the Federal Reserve would ease slightly, although continued preservation of its interest rate target in light of temporary increases in money demand are equally likely. If they follow correct policies, as assumed in table 6, the recession will be mild, as our results show.

Other forecasted assumptions are as follows:

a. Barrels of imported oil are expected to increase by 5.6% in 1990 despite current Persian Gulf disruptions and an additional 3.3% in 1991. Prices are expected to rise by 21% in 1990 and an additional 14%in 1991. No oil excise, gasoline, or other energy tax is assumed.

b. No changes are expected in the cost of living adjustments for government programs. Cost of living adjustments of 5.2% were used for the next two fiscal years. Also, government wages were expected to grow by 3.6% next year and by 3.5% the year after.

c. The wage base for Social Security was assumed to be $53,500 in 1991 and $56,000 in 1992. No further changes in the tax rate were assumed. No changes in the tax treatment of benefits was assumed.

d. Minimum wage legislation was assumed to raise the minimum to $4.25 on April 1991. No further changes were assumed for 1992.

e. World trade is expected to grow 4% in 1990 and 3% in 1991, partially because of the Persian Gulf disruptions.

f. Postal rates were assumed to rise to 30 cents for first class mail during the second quarter of 1991.

g. Fears of labor disputes in autos added to summer production at the expense of next fall. No major strikes were assumed and the current parts disruption was not expected to have noticeable impact.

CONCLUSION

Although a recession would not have occurred in the absence of oil price increases caused by the Persian Gulf conflict, higher interest rates and reduced purchasing power from the oil price increase probably will add enough to the weakness generated by restrictive monetary policy and financial regulatory pressures to push the economy into a mild recession. As a result, economic activity should expand only 1.1% this year and an anemic 0.5% next year. Recovery should begin sometime next spring. At the same time inflation will intensify because of higher oil prices, causing the CPI to rise by 5.2% this year and 5% next year. The GNP deflator is expected to increase 4.3% this year and 4.7% next year.

Because of the recession, unemployment should rise by a percentage point to 6.3% by the end of next year. After falling 400,000 during the next six months, private employment should rise 0.6% next year. However, job losses still will occur in manufacturing; construction; transportation services; communications; general merchandise, auto and small retailing; and federal government following the census. Therefore, many employees still will feel a recession through 1991.

The current spurt in interest rates should begin to subside late this year, and the prime rate should fall to 8.5% by next summer. More modest declines are projected for long-term interest rates and mortgage rates. Stock prices are expected to fall to the vicinity of 2400 as measured by the Dow Jones before rebounding next year.

While at least a mild recession now seems assured in light of data adjustments in the service and wage earning sector, regulatory and Federal Reserve restraint into the summer, and the disruptions caused by the Persian Gulf conflict, the magnitude and duration of this decline remain uncertain. The magnitude of the oil shock still is evolving, although some shock seems assured. Also, the cumulative weakness that traditionally develops in recession may not be adequately captured by our forecasting model, although every attempt to capture recessionary expectations and financial stress has been made. Thus, a wide dispersion, especially to the downside in economic activity, should be placed around the forecasted values.

Hopefully, our forecast next summer will be discussing the economic recovery from this recession.

Table 1.

U. S. Expenditures in Current Dollars
for 1990-I and 1990-II with Forecasts for 1990-III through 1993-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	II 92	89/88	90/89	91/90	1989	1990	1991
1. Personal Consumption	3588.1	3619.5	3688.6	3747.5	3816.3	3854.5	3918.3	3980.6	4048.0	4112.1	6.5	6.1	6.3	3450.1	3660.9	3892.4
2. % Change(AR)	8.2	3.5	7.9	6.5	7.5	4.1	6.8	6.5	6.9	6.5						
3. Durable Goods	492.1	479.6	491.9	478.8	488.7	483.0	497.3	501.1	509.2	515.0	3.7	2.3	1.4	474.6	485.6	492.5
4. Autos, Trucks & Parts	221.1	213.2	225.5	210.4	219.8	216.2	229.1	229.3	236.7	240.4	1.5	1.0	2.8	215.5	217.6	223.6
5. Other Durable Goods	271.0	266.4	266.4	268.4	268.9	266.8	268.2	271.8	272.5	274.6	5.6	3.5	0.3	259.1	268.1	268.9
6. Nondurable Goods	1174.7	1171.5	1185.8	1212.9	1234.3	1243.4	1256.2	1271.8	1289.9	1307.6	6.6	5.0	5.5	1130.0	1186.2	1251.4
7. Services	1921.3	1968.4	2010.9	2055.8	2093.3	2128.1	2164.8	2207.7	2248.9	2289.5	7.3	7.8	8.0	1845.5	1989.1	2148.5
8. Pers Cons less Services	1666.8	1651.1	1677.7	1691.7	1723.0	1726.4	1753.5	1772.9	1799.1	1822.6	5.7	4.2	4.3	1604.6	1671.8	1744.0
9. % Change(AR)	12.1	-3.7	6.6	3.4	7.6	0.8	6.4	4.5	6.0	5.3						
10. Pvt Domestic Invstment	747.2	772.4	764.8	771.1	750.3	729.2	765.1	789.0	796.7	805.8	3.2	-1.0	-0.7	771.2	763.9	758.4
11. Residential Structures	235.9	227.7	217.6	218.1	219.4	223.8	230.5	238.0	245.1	249.9	-0.6	-2.7	1.4	231.0	224.8	227.9
12. Other Structures	148.8	146.9	147.5	149.1	151.4	151.9	152.3	152.6	154.6	156.4	4.5	1.3	2.7	146.2	148.1	152.1
13. Producer's Durables	374.3	366.6	369.2	368.4	370.1	364.2	365.0	366.0	368.5	367.5	5.0	1.1	-0.9	365.7	369.6	366.3
14. Change in Inventories	-11.8	31.2	30.5	35.5	9.4	-10.7	17.3	32.4	28.5	32.0				28.3	21.4	12.1
15. Chg in Nonfarm Inv	-17.0	30.1	28.6	34.4	3.9	-11.5	15.1	28.6	26.6	33.9				23.3	19.0	9.0
16. Net Exports	-30.0	-27.0	-26.7	-33.2	-25.5	-19.2	-9.7	-11.6	-7.1	-12.8				-46.1	-29.2	-16.5
17. Exports	661.3	661.7	668.2	680.3	690.2	700.2	716.9	730.2	749.1	761.5	13.5	6.6	6.2	626.3	667.9	709.4
18. Imports	691.3	688.7	694.9	713.5	715.7	719.4	726.6	741.8	756.2	774.3	7.4	3.7	4.1	672.3	697.1	725.9
19. Government Purchases	1070.1	1086.7	1093.5	1107.6	1120.4	1135.5	1144.6	1159.0	1177.6	1193.1	6.6	6.2	4.6	1025.6	1089.5	1139.9
20. Federal Purchases	410.6	420.7	418.9	421.5	423.5	426.6	424.5	427.3	433.5	436.5	5.2	4.5	1.8	400.0	417.9	425.5
21. Defense	307.2	309.5	308.5	304.0	306.4	309.4	307.8	302.4	307.1	310.4	1.3	2.1	-0.3	301.1	307.3	306.5
22. Nondefense	103.4	111.2	110.4	117.5	117.1	117.2	116.7	124.9	126.4	126.1	19.0	11.8	7.5	98.9	110.6	119.0
23. State and Local	659.6	666.0	674.6	686.1	696.9	708.9	720.1	731.7	744.1	756.6	7.4	7.3	6.4	625.6	671.6	714.4
24. Gross National Product	5375.4	5451.6	5520.2	5593.0	5661.5	5700.0	5818.3	5917.0	6015.2	6098.2	6.7	5.5	5.3	5200.8	5485.1	5774.2
25. Net Change(amount)	86.1	76.2	68.6	72.8	68.5	38.5	118.3	98.7	98.2	83.0				327.1	75.9	81.0
26. % Change(curr$, AR)	6.7	5.8	5.1	5.4	5.0	2.7	8.6	7.0	6.8	5.6				6.7	5.5	5.3
27. Gross Natl Product(82$)	4150.6	4163.2	4173.1	4165.4	4161.4	4150.2	4203.6	4226.2	4245.2	4258.8	2.5	1.1	0.5	4117.7	4163.1	4185.4
28. % Change(1982$, AR)	1.7	1.2	1.0	-0.7	-0.4	-1.1	5.2	2.2	1.8	1.3				2.5	1.1	0.5
29. Implicit Price Deflator	129.5	130.9	132.3	134.3	136.0	137.3	138.4	140.0	141.7	143.2	4.1	4.3	4.7	126.3	131.8	137.9
30. % Change(AR)	4.8	4.4	4.3	6.1	5.4	4.0	3.2	4.7	4.9	4.3				4.1	4.3	4.7
31. Final Sales(curr$)	5387.2	5420.5	5489.8	5557.6	5652.2	5710.8	5801.1	5884.7	5986.8	6066.3	6.7	5.6	5.5	5172.5	5463.8	5762.2
32. Net Change from Prev	122.9	33.3	69.3	67.8	94.6	58.6	90.3	83.6	102.1	79.5						
33. Final Sales(1982$)	4152.8	4137.0	4147.5	4135.0	4155.7	4157.8	4188.7	4198.2	4221.3	4228.0	2.5	1.2	0.8	4093.9	4143.1	4175.1

Table 2.

U. S. Real Expenditures
for 1990-I and 1990-II with Forecasts for 1990-III through 1993-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	II 92	89/88	90/89	91/90	1989	1990	1991
1. Personal Consumption	2677.3	2675.2	2695.1	2688.2	2704.2	2703.7	2723.8	2732.7	2744.6	2759.1	1.9	1.0	1.2	2656.8	2684.0	2716.1
2. % Change(1982$, AR)	1.1	-0.3	3.0	-1.0	2.4	-0.1	3.0	1.3	2.0	1.9						
3. Durable Goods	437.6	427.7	436.2	422.0	428.3	421.9	431.7	432.2	436.8	439.7	2.3	0.7	-0.5	428.0	430.9	428.5
4. Autos, Trucks & Parts	183.9	178.2	188.1	174.3	180.9	177.1	187.0	185.8	190.6	192.6	-0.4	-0.2	0.9	181.4	181.1	182.7
5. Other Durable Goods	253.7	249.5	248.1	247.7	247.4	244.8	244.7	246.4	246.2	247.1	4.4	1.3	-1.6	246.5	249.8	245.8
6. Nondurable Goods	915.6	905.4	905.3	903.9	906.4	906.8	910.5	910.7	912.9	915.6	1.1	-1.3	0.1	919.9	907.6	908.6
7. Services	1324.2	1342.2	1353.6	1362.3	1369.5	1375.0	1381.6	1389.8	1396.4	1403.8	2.3	2.8	2.5	1309.0	1345.6	1379.0
8. Pvt Domestic Investment	700.7	714.3	709.1	709.5	685.9	669.9	695.7	711.7	713.7	717.7	1.6	-1.2	-2.5	716.9	708.4	690.8
9. Residential Structures	188.3	181.6	173.2	171.9	171.7	173.9	177.9	182.2	185.8	187.5	-4.0	-4.4	-1.3	187.0	178.8	176.4
10. Other Structures	123.8	121.9	122.0	122.6	123.0	122.6	122.3	121.8	122.1	122.5	-0.0	0.1	-0.1	122.4	122.6	122.4
11. Producer's Durables	390.8	384.6	387.0	384.6	385.5	381.0	380.6	379.7	381.9	380.4	5.2	0.8	-1.3	383.7	386.8	381.7
12. Change in Inventories	-2.2	26.2	26.9	30.4	5.7	-7.6	14.9	28.0	23.9	27.3	----	----	----	23.8	20.3	10.3
13. Chg in Nonfarm Inv	-8.2	27.3	25.6	29.7	1.6	-8.1	13.5	25.1	22.7	28.5	----	----	----	18.7	18.6	8.0
14. Net Exports	-35.4	-46.5	-45.5	-44.2	-40.0	-36.9	-28.1	-30.4	-26.4	-30.8	----	----	----	-54.1	-42.9	-33.9
15. Exports	628.1	622.2	622.7	627.0	630.9	634.8	644.7	650.8	661.7	666.8	11.0	5.3	2.4	593.4	625.0	640.3
16. Imports	663.5	668.7	668.2	671.2	670.9	671.7	672.8	681.2	688.1	697.6	6.0	3.2	0.9	647.5	667.9	674.2
17. Government Purchases	807.9	820.2	814.4	811.9	811.3	813.5	812.2	812.2	811.8	813.4	2.3	1.9	-0.2	798.2	813.6	812.3
18. Federal Government	333.0	345.0	331.5	336.2	334.3	334.0	330.8	328.4	325.4	324.8	2.1	0.4	-1.4	335.0	336.4	331.9
19. Federal Purchases	206.0	217.0	204.5	209.8	208.8	208.7	205.8	203.7	200.9	200.4	3.2	0.4	-1.2	208.5	209.3	206.8
20. Value Added	127.0	128.0	127.0	126.4	125.5	125.3	125.0	124.7	124.5	124.4	0.3	0.5	-1.6	126.5	127.1	125.1
21. State and Local Govt	475.0	475.2	474.9	475.7	477.0	474.5	481.4	483.8	486.4	488.6	2.4	2.6	0.8	463.2	475.2	479.2
22. State & Local Purch.	214.6	213.5	212.5	212.4	212.2	208.4	214.3	215.5	216.8	217.2	2.5	3.4	-0.3	206.2	213.3	212.6
23. Value Added	260.4	261.7	262.4	263.3	264.8	266.1	267.1	268.3	269.6	271.4	2.3	1.9	1.8	257.0	262.0	266.6
24. Gross National Product	4150.6	4163.2	4173.1	4165.4	4161.4	4150.2	4203.6	4226.2	4245.2	4258.8	2.5	1.1	0.5	4117.7	4163.1	4185.4
25. % Change(1982$, AR)	1.7	1.2	1.0	-0.7	-0.4	-1.1	5.2	2.2	1.8	1.3						
26. Final Sales Demand	4152.8	4137.0	4146.2	4135.0	4155.7	4157.8	4188.7	4198.2	4221.3	4231.5	2.5	1.2	0.8	4093.9	4142.8	4175.1
27. % Change(1982$, AR)	3.8	-1.5	0.9	-1.1	2.0	0.2	3.0	0.9	2.2	1.0						
28. Gross Domestic Product	4118.2	4135.8	4144.5	4135.4	4132.9	4118.7	4173.7	4196.8	4216.9	4231.0	2.5	1.1	0.5	4087.6	4133.5	4155.5
29. Government Contribution	387.4	389.7	389.4	389.7	390.3	391.4	392.7	392.0	394.1	395.2	1.7	1.5	0.7	383.5	389.1	391.6
30. Private Domestic Product	3730.8	3746.1	3755.1	3745.7	3742.6	3727.3	3781.0	3804.8	3822.8	3835.8	2.6	1.1	0.5	3704.1	3744.4	3763.9
31. % Change(1982$, AR)	1.9	1.7	1.0	-1.0	-0.3	-1.6	5.9	2.5	1.9	1.4						

Table 3.

Income Related U. S. Gross National Product Components
for 1990-I and 1990-II with Forecasts for 1990-III through 1993-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	II 92	89/88	90/89	91/90	1989	1990	1991
1. Compensation of Employees	3180.4	3229.1	3272.0	3306.6	3354.7	3392.1	3448.2	3499.8	3560.6	3619.7	6.0	5.5	5.4	3079.0	3247.0	3423.7
2. Wages & Salaries	2651.6	2693.3	2728.1	2756.1	2793.0	2823.9	2870.8	2914.2	2963.0	3012.6	5.8	5.2	5.3	2573.3	2707.3	2850.5
3. Manufacturing Ind	541.2	547.9	554.5	554.6	558.5	558.2	567.1	572.7	579.9	585 0	3.4	1.4	2.7	541.8	549.6	564.1
4. Other Producing Ind	183.4	181.4	180.3	181.3	182.8	185.8	189.4	191.9	195.1	198.5	3.7	1.6	3.2	178.7	181.6	187.5
5. Distributive Industry	627.0	636.9	645.8	652.3	660.4	665.5	675.9	685.6	696.0	706.6	5.7	5.9	4.9	604.7	640.5	671.9
6. Service Industry	802.9	821.7	837.8	853.7	869.8	885.8	904.3	923.7	943.2	962.4	7.7	7.5	8.1	771.4	829.0	895.9
7. Military Compensation	82.1	82.3	82.1	81.6	82.8	83.0	82.4	81.9	84.9	85.7	4.1	4.1	0.6	78.8	82.0	82.5
8. Other Government	415.0	423.2	427.6	432.6	438.7	445.6	451.7	458.4	463.9	474.4	7.3	6.7	5.7	397.8	424.6	448.6
9. Supplements to W & S	528.8	535.9	543.4	550.5	561.7	568.2	577.4	585.6	597.6	607.1	6.7	6.7	6.2	505.8	539.7	573.2
10. Proprietors Income	404.0	402.8	395.9	403.4	407.7	404.1	407.1	413.2	417.6	417.1	7.1	5.9	1.6	379.3	401.5	408.0
11. Business & Professional	346.6	352.1	352.3	353.6	352.5	351.7	357.6	361.4	364.2	367.5	6.5	6.2	1.3	330.7	351.2	355.8
12. Farm Proprietors	57.4	50.7	43.6	49.8	55.2	52.4	49.5	51.8	53.4	49.6	11.3	3.6	3.7	48.6	50.4	52.2
13. Rental Income	5.5	4.4	5.7	7.8	8.9	9.7	11.5	12.9	13.8	14.5	-49.5	-28.9	83.8	8.2	5.9	10.8
14 Net Interest	463.6	470.0	479.6	493.4	504.2	514.6	525.9	535.8	545.8	556.6	19.7	7.1	9.1	445.1	476.7	520.1
15. Corporate Profits(adj)	296.8	298.1	304.0	293.5	288.5	277.9	302.5	311.0	326.6	338.7	-7.7	-4.3	-1.0	311.6	298.1	295.0
16. National Income	4350.3	4404.4	4457.2	4504.7	4564.0	4598.0	4695.2	4772.7	4864.4	4946.6	6.0	4.9	5.2	4223.3	4429.2	4657.5
17. Indirect Business Tax	431.7	432.5	440.4	447.8	457.4	463.0	471.7	479.2	487.9	496.4	6.5	5.8	6.8	414.0	438.1	467.8
18. Capital Consumption Adj	28.4	31.8	34.3	-37.9	-42.3	-46.0	-48.2	-50.7	-53.9	-57.2				12.5	14.2	-46.8
19. Capital Cons. Allowance	538.6	539.3	539.9	542.3	544.3	546.6	548.8	551.1	554.0	557.1	1.3	-0.3	1.4	541.9	540.0	547.7
20. Business Transfers	34.1	34.7	35.4	36.1	36.8	37.6	38.3	39.0	39.8	40.5	7.0	8.3	8.1	32.4	35.1	37.9
21. Net Govt Subsidies	-8.4	-3.6	-2.3	-5.7	-6.6	-3.4	-0.8	5.2	-5.7	-6.2	-61.3	-20.3	-72.0	-6.3	-5.0	-1.4
22. Statistical Descrepancy	0.6	12.5	15.3	29.9	23.3	11.8	16.6	19.1	20.9	6.6				-13.8	14.6	17.7
23. Gross National Product	5375.4	5451.6	5520.2	5593.0	5661.5	5700.0	5818.3	5917.0	6015.2	6098.2	6.7	5.5	5.3	5200.8	5485.1	5774.2

Table 4.

Derivation of U. S. Personal Income
for 1990-I and 1990-II with Forecasts for 1990-III through 1993-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	II 92	89/88	90/89	91/90	1989	1990	1991
1. National Income	4350.3	4404.4	4457.2	4504.7	4564.0	4598.0	4695.2	4772.7	4864.4	4946.6	6.0	4.9	5.2	4223.3	4429.2	4657.5
Less:																
2. Adj. Corporate Profits	296.8	298.1	304.0	293.5	288.5	277.9	302.5	311.0	326.6	338.7	-7.7	-4.3	-1.0	311.6	298.1	295.0
3. Social Insurance	498.9	503.3	511.2	516.0	532.4	536.7	545.8	553.1	570.2	577.9	7.7	6.4	6.8	476.8	507.4	542.0
Plus:																
4. Government Transfers	646.8	651.5	662.1	674.0	698.1	706.3	717.7	729.0	752.7	759.2	8.4	9.0	8.2	604.5	658.6	712.8
5. Social Security, etc	347.2	347.1	352.3	356.6	370.1	372.4	377.5	381.7	395.6	398.2	8.2	7.9	7.0	325.3	350.8	375.4
6. Unemployment Benefits	16.3	17.3	17.9	19.5	20.8	22.6	23.2	23.9	23.8	23.7	8.9	21.2	27.5	14.7	17.8	22.6
7. Veterans Benefits	17.9	17.9	17.9	17.8	18.4	18.3	18.3	18.2	18.9	18.9	2.7	3.2	2.4	17.3	17.9	18.3
8. Employees Retirement	96.1	96.0	97.5	98.9	102.7	103.6	104.5	106.2	110.5	111.4	7.3	7.8	7.3	90.1	97.1	104.3
9. A. F. D. C.	19.1	19.6	19.9	20.1	20.5	20.7	21.0	21.3	21.6	21.7	4.1	9.6	6.1	18.0	19.7	20.9
10. Other Govt Transfers	150.1	153.5	156.6	161.0	166.6	169.7	174.2	178.7	183.3	186.3	11.1	11.6	10.9	139.2	155.3	172.3
11. Business Transfers	34.1	34.7	35.4	36.1	36.8	37.6	38.3	39.0	39.8	40.5	7.0	8.3	8.1	32.4	35.1	37.9
12. Interest Transfers	206.9	211.2	215.3	221.1	224.6	229.1	230.6	234.5	236.5	240.1	12.4	7.9	7.5	198.0	213.6	229.7
13. Personal Dividends	120.5	122.9	124.3	125.6	127.1	128.4	129.8	131.3	132.9	134.5	11.9	7.8	4.7	114.4	123.3	129.2
Equals:																
14. Personal Income	4562.8	4623.4	4676.0	4752.1	4829.7	4884.0	4963.3	5042.4	5129.5	5204.3	7.7	6.1	5.9	4384.3	4653.6	4929.9
Less:																
15. Personal Tax Payments	675.1	693.7	696.1	706.9	723.7	728.0	742.0	756.8	781.3	787.1	11.4	5.2	6.4	658.8	693.0	737.6
Equals:																
16. Personal Disposable Inc	3887.7	3929.6	3979.9	4045.2	4106.0	4156.0	4221.3	4285.6	4348.2	4417.2	7.1	6.3	5.8	3725.5	3960.6	4192.2
Less:																
17. Personal Consumption	3588.1	3619.5	3688.6	3747.5	3816.3	3854.5	3918.3	3980.6	4048.0	4112.1	6.5	6.1	6.3	3450.1	3660.9	3892.4
18. Other Outlays	108.3	108.9	109.7	110.7	111.2	112.3	113.1	114.2	115.2	116.6	8.6	5.6	3.0	103.6	109.4	112.7
Equals:																
19. Personal Savings	191.3	201.2	181.6	187.0	178.5	189.2	189.9	190.8	185.0	188.5	18.0	10.7	-1.7	171.8	190.3	187.1
20. Savings Rate(%, AR)	4.9	5.1	4.6	4.6	4.3	4.6	4.5	4.5	4.3	4.3	10.8	3.8	-6.8	4.6	4.8	4.5

Table 5.

U. S. Federal Government Activity
for 1990-I and 1990-II with Forecasts for 1990-III through 1993-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	II 92	89/88	90/89	91/90	1989	1990	1991
1. Government Receipts	1080.6	1094.8	1113.0	1125.9	1156.7	1150.4	1178.9	1202.1	1255.1	1264.3	8.3	4.8	6.2	1052.9	1103.6	1172.0
2. Personal Tax & Nontax	473.6	489.4	489.3	496.1	510.6	510.7	520.3	529.4	552.1	553.1	11.8	5.0	6.3	464.0	487.1	517.8
3. Corporate Profits Tax	106.5	101.2	112.1	112.7	111.7	100.9	111.0	117.9	131.5	132.0	-0.1	-2.1	2.1	110.4	108.1	110.4
4. Indirect Business Tax	60.6	60.7	61.6	63.3	65.2	66.1	67.3	68.1	69.3	70.5	2.5	5.4	8.3	58.4	61.6	66.7
5. Social Security Contr	439.9	443.5	450.0	453.8	469.2	472.7	480.4	486.7	502.2	508.7	7.8	6.4	6.8	420.1	446.8	477.3
6. Government Expenditures	1248.8	1257.1	1268.0	1294.0	1324.0	1336.2	1347.5	1361.2	1399.1	1413.1	6.5	6.7	5.9	1187.1	1267.0	1342.2
7. Purchases of Goods and Services	410.6	420.7	418.9	421.5	423.5	426.6	424.5	427.3	433.5	436.5	5.2	4.5	1.8	400.0	417.9	425.5
8. Defense	307.2	309.5	308.5	304.0	306.4	309.4	307.8	302.4	307.1	310.4	1.3	2.1	-0.3	301.1	307.3	306.5
9. Durables	78.6	82.0	81.3	77.4	77.9	81.2	80.7	76.3	76.8	79.4	-2.6	-1.3	-1.0	80.9	79.8	79.0
10. Nondurables	10.0	10.5	10.9	11.5	11.6	11.2	10.8	10.7	10.8	10.5	3.2	2.6	3.3	10.5	10.7	11.1
11. Military Payroll	82.1	82.3	82.1	81.6	82.0	83.0	82.4	81.9	84.9	85.7	4.1	4.1	0.4	78.8	82.0	82.3
12. Civilian Payroll	41.4	41.8	41.7	41.7	42.5	42.8	42.7	43.0	44.5	44.6	7.6	3.7	2.6	40.2	41.7	42.8
13. Other Services	88.8	87.6	86.9	86.5	86.6	86.0	86.2	85.8	85.3	85.6	0.5	3.7	-1.5	84.3	87.5	86.2
14. Structures	6.2	5.4	5.6	5.3	5.0	5.2	5.0	4.7	4.8	4.6	-9.2	-12.5	-11.6	6.4	5.6	5.0
15. Nondefense	103.4	111.2	110.4	117.5	117.1	117.2	116.7	124.9	126.4	126.1	19.0	11.8	7.5	98.9	110.6	119.0
16. Durables	5.4	5.7	5.8	6.0	6.1	6.0	6.0	6.1	6.2	6.3	17.0	7.5	5.7	5.3	5.7	6.1
17. Nondurables	0.0	4.7	4.1	9.5	7.3	5.5	4.1	10.1	8.3	6.6	-117.5	215.5	47.5	1.5	4.6	6.8
18. CCC Inventory Chg	-6.8	-2.5	-3.7	1.1	-1.0	-2.6	-4.1	2.0	0.1	-1.7	-66.1	-43.6	-52.1	-5.3	-3.0	-1.4
19. Other Nondurables	6.8	7.3	7.8	8.4	8.3	8.1	8.2	8.1	8.2	8.3	-7.6	12.6	7.9	6.7	7.6	8.2
20. Compensation	53.1	54.9	53.5	53.2	53.9	54.3	54.5	55.2	57.4	57.7	7.1	8.4	1.5	49.5	53.7	54.5
21. Other Services	36.8	38.0	39.2	40.8	41.8	43.2	44.0	45.3	46.3	47.2	5.6	8.7	12.6	35.6	38.7	43.6
22. Structures	8.1	7.8	7.8	8.0	8.0	8.2	8.1	8.2	8.2	8.3	2.6	12.8	2.5	7.0	7.9	8.1
23. Transfer Payments	503.4	503.4	512.9	524.3	542.9	547.3	558.3	568.3	583.9	588.0	7.5	8.3	8.5	471.9	511.0	554.2
24. Grants-In-Aid to State and Local Govt	128.5	126.5	126.9	129.3	133.2	136.7	139.0	141.2	143.7	146.0	6.4	8.1	7.6	118.2	127.8	137.5
25. Net Interest Paid	178.1	182.7	186.5	192.6	196.5	200.3	202.5	206.6	208.7	212.1	13.7	7.5	8.9	172.0	185.0	201.5
26. Deficit of Government Enterprises	28.3	23.7	22.8	26.5	27.9	25.3	23.2	17.8	29.3	30.5	-23.5	1.2	-7.0	25.0	25.3	23.6
27. Federal Surplus	-168.3	-162.3	-155.0	-168.3	-167.3	-185.8	-168.6	-159.1	-144.0	-148.8	----	----	----	-134.3	-163.5	-170.2
28. State and Local Surplus	38.1	29.3	32.7	31.8	34.1	30.1	35.4	38.3	40.8	42.2	----	----	----	46.5	33.0	34.5
29. Total Government Surplus	-130.2	-133.0	-122.3	-136.5	-133.2	-155.7	-133.2	-120.8	-103.2	-106.6				-87.8	-130.5	-135.7
30. Federal Debt held by Individuals	2106.8	2135.8	2208.4	2253.4	2338.3	2381.7	2437.9	2463.8	2522.5	2535.2	8.5	8.2	10.5	2011.0	2176.1	2405.4

Table 6.

Selected Economic Variables in the U. S. Economy
for 1990-I and 1990-II with Forecasts for 1990-III through 1993-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	II 92	89/88	90/89	91/90	1989	1990	1991
PRICES																
1. Consumer Price Index	128.0	129.3	131.0	133.1	134.8	136.3	137.7	139.1	140.7	142.3	4.8	5.2	5.1	124.0	130.4	137.0
2. % Change (AR)	7.1	4.1	5.3	6.6	5.2	4.5	4.2	4.1	4.7	4.6						
3. PPI - Indust. Commodities	113.6	113.2	114.0	115.8	117.1	117.3	117.2	117.8	119.3	119.8	5.0	2.3	2.8	111.6	114.1	117.4
4. % Change (AR)	4.8	-1.6	3.0	6.5	4.6	0.7	-0.3	2.1	5.2	1.7						
5. PPI - Finished Goods	117.3	117.5	118.9	121.3	122.7	123.1	123.6	124.6	126.3	127.2	5.1	4.6	4.0	113.5	118.8	123.5
6. % Change (AR)	8.4	0.7	4.7	8.3	4.7	1.3	1.6	3.3	5.6	2.9						
CORPORATE ECONOMY																
7. After Tax Profits	167.1	155.3	172.8	176.3	171.1	160.8	171.8	180.4	195.5	196.7	-4.4	-2.7	1.9	172.6	167.9	171.0
8. Inventory Profits	-11.4	1.8	-11.5	-23.8	-19.3	-3.9	-2.3	-10.0	-24.9	-12.9				-21.7	-11.2	-8.9
9. Genuine Profits	166.9	175.0	167.1	155.8	152.0	155.0	166.7	166.5	164.8	176.3	-12.4	-5.8	-3.7	176.5	166.2	160.0
10. Dow-Jones Index - Mean Closing	2664.5	2799.0	2684.4	2443.8	2416.9	2581.2	2773.3	2823.4	2792.5	2973.4	21.7	5.5	0.0	2508.9	2647.9	2648.7
11. New York Composite Index - Mean Closing	185.59	191.21	181.46	173.65	172.47	176.55	184.67	185.53	183.67	191.42	20.1	1.6	-1.7	180.02	182.98	179.81
FINANCIAL																
12. Monetary Base	300.9	305.7	311.4	317.6	322.7	327.4	332.2	337.6	343.0	348.3	4.3	6.3	6.8	290.7	308.9	330.0
13. Checkable Deposits	573.8	575.8	574.3	573.9	577.9	584.8	594.1	604.8	613.4	618.2	-0.8	1.5	2.8	566.2	574.4	590.4
14. M1	800.3	807.5	811.7	817.5	825.7	836.4	849.5	864.3	877.4	886.8	1.0	3.3	4.3	783.7	809.3	844.0
15. Velocity of M1	6.664	6.707	6.754	6.792	6.810	6.763	6.800	6.798	6.810	6.832	5.6	2.1	0.9	6.588	6.729	6.793
16. M2	3272.6	3268.8	3280.4	3323.0	3371.0	3416.4	3473.9	3535.6	3592.5	3642.6	3.7	5.0	5.0	3129.5	3286.2	3449.2
17. Velocity of M2	1.630	1.657	1.671	1.671	1.668	1.656	1.663	1.662	1.663	1.663	2.8	0.4	0.3	1.650	1.657	1.662
INTEREST RATES																
18. Federal Funds Rate	8.25	8.24	7.93	7.62	7.43	7.06	6.83	6.96	7.05	7.01	21.8	-13.1	-11.7	9.22	8.01	7.07
19. Prime Rate	10.04	10.00	9.94	9.50	9.38	8.92	8.50	8.89	9.00	9.00	16.7	-9.2	-9.6	10.87	9.87	8.92
20. 3 Month Treasury Bill	7.76	7.75	7.51	7.22	6.98	6.71	6.45	6.67	6.74	6.68	21.7	-6.8	-11.3	8.11	7.56	6.70
21. 6 Month Treasury Bill	7.70	7.74	7.62	7.43	7.08	6.76	6.59	6.84	6.89	6.74	16.2	-5.1	-10.6	8.03	7.62	6.82
22. 1 Year Treasury Bond	8.13	8.27	8.30	7.96	7.52	7.14	6.92	7.11	7.15	6.92	11.5	-4.3	-12.2	8.54	8.17	7.17
23. 7 Year Treasury Bond	8.44	8.70	8.68	8.59	8.26	8.09	7.95	8.05	8.01	7.93	-2.2	1.0	-6.0	8.52	8.60	8.09
24. 30 Year Treasury Bond	8.44	8.65	8.73	8.70	8.43	8.15	8.03	8.12	8.05	7.98	-5.7	2.1	-5.2	8.45	8.63	8.18
25. Seasoned AAA Corps	9.19	9.40	9.38	9.48	9.36	9.12	9.01	9.03	8.96	8.85	-4.7	1.1	-2.5	9.26	9.36	9.13
26. FHA Mortgage Rate	10.12	10.34	10.43	10.24	10.17	10.15	10.11	10.05	9.98	9.91	-0.1	-0.4	-1.6	10.32	10.28	10.12
ADDITIONAL INDICATORS																
27. Housing Starts	1454	1199	1224	1197	1239	1246	1295	1346	1386	1392	-7.0	-8.5	1.0	1386	1269	1282
28. Single Family Starts	1083	894	912	893	922	936	974	1011	1026	1025	-7.0	-6.4	1.6	1010	946	961
29. Multiple Family Starts	371	305	312	304	317	310	321	335	360	367	-7.1	-14.2	-0.7	377	323	321
30. Unit Auto Sales	9.73	9.45	10.03	8.96	9.36	9.05	9.82	9.73	10.05	10.15	-6.7	-3.7	-0.6	9.91	9.54	9.49
31. Industry Production Indx	108.3	109.3	110.1	109.6	109.1	108.4	110.1	110.7	111.1	111.3	2.6	1.1	0.2	108.1	109.3	109.6
32. Capacity Utilization	83.1	83.3	83.4	82.5	81.6	80.6	81.4	81.3	81.1	80.7	0.2	-1.4	-2.2	84.2	83.1	81.2

Table 7.

U. S. Foreign Trade Accounts
for 1990-I and 1990-II with Forecasts for 1990-III through 1993-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	II 92	89/88	90/89	91/90	1989	1990	1991
MERCHANDISE TRADE (Not Seasonally Adjusted, Annual Rates)																
1. Merchandise Exports	388614	398779	385837	403961	410111	420370	414970	435190	444619	457349	13.5	8.3	6.6	364142	394298	420160
2. Food & Live Animals	30513	29941	28830	29120	30760	30220	30430	31170	33060	33010	12.5	-0.4	3.5	29724	29601	30645
3. Beverages & Tobacco	6174	7246	7390	8420	7940	8730	8950	9860	9320	10150	21.1	32.6	21.4	5510	7308	8870
4. Crude Materials	30461	26763	27110	28060	29730	27250	27580	28270	30150	28820	7.2	4.3	0.4	26947	28099	28207
5. Mineral Fuels	10467	10289	10470	11690	10860	10420	10370	12420	12130	11950	20.5	8.8	2.7	9865	10729	11018
6. Animal & Vegetable Oil	1257	1243	1226	1170	1230	1250	1240	1260	1350	1360	-7.1	-9.3	1.7	1350	1224	1245
7. Chemicals	37344	40717	37730	36680	38150	41690	40430	40130	42760	45950	13.0	4.5	5.2	36485	38118	40100
8. Manufactured Goods	30949	32113	32000	32160	33470	35120	35720	36100	37650	39420	19.3	16.7	10.4	27243	31806	35103
9. Machinery, Trnspt. Eq.	172067	177471	171560	183610	180630	186630	183430	196210	194020	200730	10.1	18.4	6.0	148800	176177	186725
10. Misc. Manufacturing	37962	39338	39010	40170	42630	44620	44780	45670	47890	49810	33.1	19.9	13.6	32638	39120	44425
11. Commodities, n.e.c.	13676	15117	12950	14930	16150	16020	13690	15150	16680	16550	11.6	-54.7	7.6	31249	14168	15252
12. Foreign Merchandise	17743	18541	17560	17950	18560	18420	18350	18950	19610	19600	15.8	25.2	3.5	14333	17948	18570
13. Merchandise Imports	478610	475692	486991	511000	489853	497936	504014	523136	508730	526990	7.3	3.1	3.2	473397	488073	503735
14. Food & Live Animals	24414	22545	21730	22210	23370	23160	22580	23360	24450	24130	2.9	9.9	1.7	20686	22724	23118
15. Beverages & Tobacco	4186	4376	4510	5460	4480	4630	4780	5660	4890	5020	5.4	6.2	5.5	4364	4633	4887
16. Crude Materials	14453	15044	15520	15120	14730	14760	15850	16940	17860	19110	14.7	-2.2	3.6	15370	15034	15570
17. Mineral Fuels	65085	52156	60422	75330	73348	68636	69859	75704	79926	82366	28.1	20.1	13.7	52649	63248	71887
18. Animal & Vegetable Oil	658	898	840	810	835	850	835	830	845	865	-13.9	9.7	4.5	731	801	838
19. Chemicals	22713	23108	23160	24180	26220	26050	26340	26950	28430	28270	4.4	12.2	13.3	20752	23290	26390
20. Manufactured Goods	57998	60265	59850	57780	55930	57720	56670	57640	57150	59840	0.6	-4.9	-3.4	61991	58973	56990
21. Machinery, Trnspt. Eq.	199260	207025	196230	209430	198830	206690	197320	210650	198370	206430	4.4	-1.3	0.2	205761	202986	203373
22. Misc. Manufacturing	73727	74635	88300	82630	74990	77450	91430	85760	77960	81250	8.8	4.2	3.2	76639	79823	82408
23. Commodities, n.e.c.	16118	15641	16430	18050	17120	17990	18350	19640	18850	19710	14.1	14.6	10.4	14453	16560	18275
FOREIGN TRANSACTIONS - GNP ACCOUNTS (Seasonally Adjusted, Annual Rates)																
24. Total Exports	661.3	661.7	668.2	680.3	690.2	700.2	716.0	730.2	749.1	761.5	13.5	6.6	6.2	626.3	667.9	709.2
25. Mdse Exports	394.2	394.4	395.8	404.0	413.1	417.4	427.0	435.2	447.6	454.4	14.1	7.3	6.6	370.0	397.1	423.2
26. Factor Income	134.7	133.1	135.9	138.3	135.6	139.2	142.3	145.7	148.8	151.7	13.9	0.2	3.8	135.3	135.5	140.7
27. Other Services	132.4	134.2	136.5	138.0	141.5	143.6	147.6	149.3	152.7	155.4	11.0	11.8	7.6	121.1	135.3	145.5
28. Total Imports	691.3	688.7	694.9	713.5	715.7	719.4	726.6	741.8	756.2	774.3	7.4	3.7	4.1	672.3	697.1	725.9
29. Mdse Imports	497.8	490.2	495.0	511.0	509.9	512.9	514.0	523.1	528.7	542.0	6.8	3.7	3.3	480.9	498.5	515.0
30. Factor Income	93.1	97.5	97.6	98.0	96.8	95.9	100.9	104.6	108.7	111.9	14.5	-1.1	3.1	97.7	96.6	99.6
31. Other Services	100.4	101.0	102.3	104.5	109.0	110.6	111.7	114.1	118.8	120.4	3.4	8.8	9.1	93.8	102.1	111.4
32. Net Transfer Payments	14.0	13.9	15.6	18.9	15.9	15.8	18.0	20.6	15.5	16.3	-1.5	5.6	12.7	14.8	15.6	17.6
33. Government Interest	37.6	37.7	38.0	38.9	39.6	40.3	41.0	42.3	43.5	44.3	19.1	5.8	7.2	36.0	38.1	40.8
34. Net Foreign Investment	-81.6	-78.6	-80.3	-91.0	-81.0	-75.3	-68.7	-74.5	-66.1	-73.4	-18.8	-14.4	-9.7	-96.8	-82.9	-74.9
35. Trade Weighted Value of Dollar (3/73 = 100)	93.1	92.7	89.5	87.6	89.8	90.7	92.8	93.6	94.7	93.2	6.2	-7.9	1.1	98.5	90.7	91.7

Table 8.

Personal Consumption Expenditure Implicit Price Deflators
for 1990-I and 1990-II with Forecasts for 1990-III through 1993-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	II 92	89/88	90/89	91/90	1989	1990	1991
1. Durable Goods	112.5	112.1	112.8	113.5	114.1	114.5	115.2	115.9	116.6	117.1	1.4	1.6	2.0	110.9	112.7	114.9
2. Percent Change(AR)	4.0	-1.1	2.3	2.5	2.3	1.3	2.5	2.6	2.2	1.9						
3. Automobiles	120.2	119.6	119.9	120.7	121.5	122.1	122.5	123.4	124.2	124.8	1.9	1.1	1.9	118.8	120.1	122.4
4. Percent Change(AR)	3.6	-1.9	0.8	2.8	2.7	1.9	1.4	3.0	2.5	2.0						
5. Furniture	98.6	98.1	98.5	99.0	99.1	98.9	99.3	99.7	99.7	99.7	-0.1	0.6	0.7	97.9	98.6	99.3
6. Percent Change(AR)	0.6	-2.1	1.6	2.0	0.5	-0.7	1.6	1.6	-0.0	0.0						
7. Other Durables	127.2	129.2	130.4	132.2	133.5	134.9	136.2	137.6	139.0	140.5	4.3	5.9	4.5	122.6	129.8	135.6
8. Percent Change(AR)	11.2	6.3	3.9	5.5	4.1	4.1	4.0	4.3	4.0	4.2						
9. Nondurables	128.3	129.4	131.0	134.2	136.2	137.1	138.0	139.7	141.3	142.8	5.4	6.4	5.4	122.8	130.7	137.7
10. Percent Change(AR)	12.9	3.4	5.0	10.1	6.1	2.8	2.5	5.0	4.8	4.4						
11. Food	134.8	135.7	137.0	138.5	140.2	141.5	143.0	144.5	146.1	147.7	5.6	6.1	4.2	128.6	136.5	142.3
12. Percent Change(AR)	12.6	2.9	3.9	4.4	5.0	3.7	4.3	4.3	4.5	4.5						
13. Apparel	122.2	124.2	123.4	125.3	126.2	127.0	126.6	128.4	129.4	130.5	2.3	4.5	2.6	118.5	123.8	127.0
14. Percent Change(AR)	10.6	6.6	-2.5	6.3	2.8	2.7	-1.3	5.7	3.3	3.4						
15. Gasoline and Oil	90.5	90.0	95.5	108.6	111.6	110.5	109.5	111.0	113.4	114.8	9.2	10.9	15.1	86.7	96.1	110.6
16. Percent Change(AR)	24.9	-2.4	26.6	67.3	11.5	-3.9	-3.6	5.6	9.3	4.9						
17. Fuel Oil	95.2	85.3	91.2	104.7	114.9	111.7	110.7	114.4	117.3	118.4	4.7	17.0	20.0	80.4	94.1	112.9
18. Percent Change(AR)	61.2	-35.5	30.8	73.8	44.8	-10.6	-3.7	14.1	10.4	4.0						
19. Other Nondurables	142.2	144.9	147.1	149.5	151.6	153.6	155.4	157.2	159.0	160.9	5.8	5.8	5.8	138.0	145.9	154.4
20. Percent Change(AR)	3.8	7.7	6.3	6.6	5.7	5.4	4.8	4.7	4.7	4.9						
21. Services	145.1	146.7	148.6	150.9	152.9	154.8	156.7	158.9	161.0	163.1	4.8	4.8	5.4	141.0	147.8	155.8
22. Percent Change(AR)	4.8	4.4	5.3	6.5	5.3	5.1	5.0	5.6	5.7	5.2						
23. Housing	147.8	149.5	151.7	154.0	155.6	157.5	159.6	161.8	164.0	166.3	4.5	5.1	5.2	143.5	150.8	158.6
24. Percent Change(AR)	3.8	4.7	5.9	6.2	4.2	4.9	5.5	5.6	5.6	5.7						
25. Electricity and Gas	119.0	118.0	119.0	122.0	123.4	124.2	123.7	126.0	127.7	126.9	2.8	2.9	4.0	116.1	119.5	124.3
26. Percent Change(AR)	5.6	-3.4	3.2	10.5	4.6	2.8	-1.5	7.4	5.7	-2.5						
27. Other Household Opns	132.4	133.3	134.0	134.9	135.9	137.4	138.5	139.8	140.9	142.1	2.0	2.6	3.2	130.2	133.6	137.9
28. Percent Change(AR)	5.0	2.5	2.2	2.8	3.1	4.5	3.2	3.8	3.1	3.5						
29. Transportation	133.9	137.0	138.9	141.5	144.7	146.4	148.3	150.0	151.7	153.5	4.3	5.7	6.9	130.5	137.9	147.3
30. Percent Change(AR)	9.5	9.7	5.5	7.8	9.2	4.9	5.0	4.8	4.7	4.7						
31. Medical Care	157.0	159.4	162.0	165.0	167.5	170.2	173.1	176.2	179.3	182.5	6.4	5.9	6.8	151.8	160.8	171.7
32. Percent Change(AR)	3.2	6.2	6.8	7.7	6.1	6.7	6.9	7.4	7.2	7.4						
33. Other Services	144.2	145.8	147.4	149.5	151.2	152.9	154.6	156.3	158.2	160.0	4.8	4.1	4.8	140.9	146.7	153.7
34. Percent Change(AR)	3.4	4.4	4.5	5.9	4.6	4.6	4.5	4.5	5.0	4.6						

Table 9.

Gross National Product Implicit Price Deflators
for 1990-I and 1990-II with Forecasts for 1990-III through 1993-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	II 92	89/88	90/89	91/90	1989	1990	1991
1. Gross National Product	129.5	130.9	132.3	134.3	136.0	137.3	138.4	140.0	141.7	143.2	4.1	4.3	4.7	126.3	131.8	137.9
2. Percent Change(AR)	4.8	4.4	4.3	6.2	5.2	3.9	3.2	4.7	4.9	4.3						
3. Personal Consumption	134.0	135.3	136.9	139.4	141.1	142.6	143.9	145.7	147.4	149.0	4.5	5.0	5.1	129.9	136.4	143.3
4. Percent Change(AR)	6.8	3.9	4.8	7.5	5.0	4.3	3.7	5.1	4.7	4.4						
5. Consumer Price Index	128.0	129.3	131.0	133.1	134.8	136.3	137.7	139.1	140.7	142.3	4.8	5.2	5.1	124.0	130.4	137.0
6. Percent Change(AR)	7.1	4.0	5.4	6.6	5.2	4.5	4.2	4.1	4.7	4.6						
7. Private Domestic Invest	106.6	108.1	107.9	108.7	109.4	108.9	110.0	110.9	111.6	112.3	1.6	0.2	1.8	107.6	107.8	109.8
8. Percent Change(AR)	3.5	-5.4	1.0	-3.0	-2.6	2.0	-4.0	-3.2	-2.7	-2.3						
9. Structures	120.2	120.5	120.9	121.6	123.1	123.9	124.5	125.3	126.6	127.7	4.5	1.2	2.8	119.4	120.8	124.2
10. Percent Change(AR)	2.4	1.0	1.3	2.3	5.0	2.6	2.0	2.6	4.2	3.5						
11. Producer's Durables	95.8	95.3	95.4	95.8	96.0	95.6	95.9	96.4	96.5	96.6	-0.2	0.3	0.4	95.3	95.6	96.0
12. Percent Change(AR)	5.2	-2.1	0.4	1.7	0.8	-1.7	1.3	2.1	0.4	0.4						
13. Residential Structures	125.3	125.4	125.6	126.9	127.8	128.7	129.6	130.6	131.9	133.3	3.6	1.8	2.7	123.6	125.8	129.2
14. Percent Change(AR)	3.3	0.3	0.6	4.2	2.9	2.8	2.8	3.1	4.0	4.3						
15. Exports	105.3	106.3	107.3	108.5	109.4	110.3	111.2	112.2	113.2	114.2	2.3	1.2	3.7	105.6	106.9	110.8
16. Percent Change(AR)	0.8	3.9	3.8	4.5	3.4	3.3	3.3	3.6	3.6	3.6						
17. Imports	104.2	103.0	104.0	106.3	106.7	107.1	108.0	108.9	109.9	111.0	1.3	0.5	3.2	103.9	104.4	107.7
18. Percent Change(AR)	5.6	-4.5	3.9	9.1	1.5	1.5	3.4	3.4	3.7	4.1						
19. Federal	123.3	121.9	123.4	125.4	126.7	127.7	128.3	130.1	133.2	134.4	3.1	3.4	3.8	119.4	123.5	128.2
20. Percent Change(AR)	10.7	-4.5	5.0	6.6	4.2	3.2	1.9	5.7	9.9	3.7						
21. Federal Purchases	113.6	111.4	113.7	116.8	117.0	118.1	119.0	121.4	124.3	124.5	1.5	2.6	4.4	111.0	113.9	118.9
22. Percent Change(AR)	6.6	-7.6	8.6	11.3	0.8	3.8	3.0	8.2	10.0	0.7						
23. Federal Value Added	139.0	139.8	139.6	139.6	142.8	143.7	143.7	144.4	150.0	151.1	2.5	4.7	3.0	133.3	139.5	143.7
24. Percent Change(AR)	16.1	2.3	-0.6	0.0	9.5	2.5	0.0	2.0	16.4	3.0						
25. State & Local	138.9	140.2	142.0	144.2	146.1	147.8	149.6	151.3	153.0	154.8	4.9	4.6	5.2	135.1	141.3	148.7
26. Percent Change(AR)	5.4	3.8	5.2	6.3	5.4	4.7	5.0	4.6	4.6	4.8						
27. State/Local Purchases	125.4	125.8	127.5	129.9	131.6	133.0	134.5	138.2	137.1	138.2	4.3	3.8	5.6	122.5	127.2	134.3
28. Percent Change(AR)	5.8	1.0	5.7	7.6	5.3	4.4	4.7	11.3	-3.2	3.2						
29. State/Local Value Added	149.9	151.9	153.8	155.8	157.7	159.7	161.7	163.6	165.8	167.8	5.4	5.3	5.1	145.1	152.9	160.7
30. Percent Change(AR)	5.5	5.4	5.1	5.3	5.0	5.2	5.1	4.8	5.5	4.9						

Table 10.

Details of Private Consumption in the U. S.
for 1990-I and 1990-II with Forecasts for 1990-III through 1993-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	II 92	89/88	90/89	91/90	1989	1990	1991
Current Dollars																
1. Durable Goods	492.1	479.6	491.9	478.8	488.7	483.0	497.3	501.1	509.2	515.0	3.7	2.3	1.4	474.6	485.6	492.5
2. Autos, Trucks & Parts	221.1	213.2	225.5	210.4	219.8	216.2	229.1	229.3	236.7	240.4	1.5	1.0	2.8	215.5	217.6	223.6
3. Furniture	178.9	176.6	176.4	176.0	176.9	174.4	175.3	177.1	177.0	177.4	5.9	3.3	-0.6	171.4	177.0	175.9
4. Other	92.0	89.8	90.0	92.4	92.0	92.4	92.9	94.7	95.5	97.2	5.1	3.8	2.1	87.8	91.1	93.0
5. Nondurable Goods	1174.7	1171.5	1185.8	1212.9	1234.3	1243.4	1256.2	1271.8	1289.9	1307.6	6.6	5.0	5.5	1130.0	1186.2	1251.4
6. Food	616.4	618.5	623.0	630.6	639.2	645.9	653.5	660.8	669.1	677.1	5.8	4.5	4.5	595.3	622.1	649.9
7. Clothing & Shoes	212.9	211.5	212.0	213.4	214.5	216.3	218.4	220.3	223.9	227.2	7.1	3.8	2.3	204.6	212.5	217.4
8. Gasoline & Oil	87.1	83.7	88.5	100.0	103.1	102.3	101.8	103.3	105.5	107.0	8.4	7.2	14.2	83.8	89.8	102.6
9. Fuel Oil & Coal	17.7	17.4	18.7	22.1	23.9	23.8	23.8	24.6	25.1	25.7	2.5	7.5	26.6	17.7	19.0	24.0
10. Other	240.5	240.5	243.6	246.8	253.6	255.1	258.7	262.8	266.3	270.6	7.9	6.2	6.1	228.7	242.9	257.6
11. Services	1921.3	1968.4	2010.9	2055.8	2093.3	2128.1	2164.8	2207.7	2248.9	2289.5	7.3	7.8	8.0	1845.5	1989.1	2148.5
12. Housing	556.3	563.2	572.0	581.7	589.1	597.2	606.3	616.1	626.5	637.6	6.3	6.4	6.0	534.0	568.3	602.2
13. Utilities	92.5	100.2	102.9	106.6	107.2	108.8	109.0	112.1	113.8	114.1	4.4	2.9	8.7	97.7	100.6	109.3
14. Other	112.7	114.2	115.5	116.7	118.4	119.3	120.8	122.5	124.0	125.5	4.6	5.7	4.8	108.6	114.8	120.3
15. Transportation	132.3	136.5	139.6	143.1	147.3	150.1	152.7	155.4	158.1	160.7	7.1	9.1	9.8	126.4	137.9	151.4
16. Medical Care	462.6	476.3	489.7	503.3	515.5	526.8	539.7	553.1	566.6	580.4	9.0	11.2	10.5	434.3	483.0	533.8
17. Other	564.9	578.0	591.2	604.9	615.8	625.9	636.3	648.5	659.9	671.2	7.9	7.4	8.0	544.5	584.8	631.6
Constant Dollars																
18. Durable Goods	437.6	427.7	436.2	422.0	428.3	421.9	431.7	432.2	436.8	439.7	2.3	0.7	-0.5	428.0	430.9	428.3
19. Autos, Trucks & Parts	183.9	178.2	188.1	174.3	180.9	177.1	187.0	185.8	190.6	192.6	-0.4	-0.2	0.9	181.4	181.1	182.7
20. Furniture	181.4	180.0	179.1	177.8	178.5	176.3	176.5	177.6	177.5	177.9	6.0	2.6	-1.3	175.0	179.6	177.2
21. Other	72.3	69.5	69.0	69.9	68.9	68.5	68.2	68.8	68.7	69.2	0.8	-2.0	-2.2	71.6	70.2	68.6
22. Nondurable Goods	915.6	905.4	905.3	903.9	906.4	906.8	910.5	910.7	912.9	915.6	1.1	-1.3	0.1	919.9	907.6	908.6
23. Food	457.4	455.7	454.7	455.3	455.9	456.5	457.0	457.3	458.0	458.4	0.2	-1.5	0.2	462.9	455.8	456.7
24. Clothing & Shoes	174.2	170.3	171.8	170.3	170.0	170.3	172.5	171.6	173.0	174.1	4.7	-0.6	-0.3	172.7	171.7	171.1
25. Gasoline & Oil	96.2	93.0	92.7	92.1	92.4	92.6	93.0	93.1	93.0	93.2	-0.7	-3.3	-0.8	96.7	93.5	92.8
26. Fuel Oil & Coal	18.6	20.4	20.5	21.1	20.8	21.3	21.5	21.5	21.4	21.7	-2.1	-8.2	5.6	22.0	20.2	21.3
27. Other	169.1	166.0	165.6	165.1	167.3	166.1	166.5	167.2	167.5	168.2	2.0	0.4	0.2	165.7	166.5	166.8
28. Services	1324.2	1342.2	1353.6	1362.3	1369.5	1375.0	1381.6	1389.8	1396.4	1403.8	2.3	2.8	2.5	1309.0	1345.6	1379.0
29. Housing	376.3	376.6	377.0	377.7	378.6	379.2	379.9	380.8	382.0	383.4	1.7	1.3	0.7	372.1	376.9	379.6
30. Utilities	77.7	84.9	86.5	87.4	86.9	87.6	88.1	89.0	89.1	89.9	1.6	-0.0	-4.5	84.2	84.1	87.9
31. Other	85.1	85.7	86.2	86.5	87.1	86.8	87.2	87.6	88.0	88.3	2.6	3.0	1.5	83.4	85.9	87.2
32. Transportation	98.8	99.6	100.5	101.1	101.8	102.5	103.0	103.6	104.2	104.7	2.8	3.2	2.7	96.9	100.0	102.7
33. Medical Care	294.7	298.9	302.3	305.0	307.8	309.5	311.8	313.9	316.0	318.0	2.4	4.9	3.5	286.1	300.2	310.8
34. Other	391.7	396.5	401.1	404.6	407.3	409.4	411.6	414.9	417.1	419.5	3.0	3.1	3.1	386.4	398.5	410.8

Table 11.

Productivity and Employment in the U. S. Economy
for 1990-I and 1990-II with Forecasts for 1990-III through 1993-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1990

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 90	II 90	III 90	IV 90	I 91	II 91	III 91	IV 91	I 92	II 92	89/88	90/89	91/90	1989	1990	1991
PRODUCTIVITY																
1. Private Domestic Wage Component - %Chg(AR)	3.2	5.6	5.6	4.9	5.2	5.5	5.1	4.7	5.0	5.3	--	--	--	2.9	3.7	5.2
2. Private Productivity % Change(AR)	-0.8	1.1	0.6	-0.5	-0.8	-0.5	3.7	0.8	0.1	0.2	--	--	--	-0.2	-0.3	0.3
3. Implicit Unit Labor Cost % Change(AR)	4.1	4.4	4.9	5.4	6.0	6.0	1.3	3.9	4.9	5.1	--	--	--	3.1	4.1	4.9
4. Private Domestic Price Deflator - %Chg(AR)	4.4	4.5	4.2	6.5	5.3	3.7	3.2	4.8	4.7	4.0	--	--	--	3.9	4.2	4.7
EMPLOYMENT																
5. Civilian Employment	118077	118285	117984	117993	118216	118242	118677	119039	119614	120178	2.0	0.6	0.4	117326	118085	118544
6. Private Employment	92197	92280	92376	92436	92591	92507	92934	93294	93753	94097	3.0	1.6	0.6	90856	92322	92832
7. Manufacturing Employment	19410	19375	19337	19186	19117	18909	18948	18935	18946	18904	1.1	-1.5	-1.8	19613	19327	18977
8. Durable Manufacturing	11357	11337	11300	11156	11104	10914	10941	10941	10968	10939	0.9	-2.2	-2.8	11537	11288	10975
9. Nondurable Mfg	8053	8037	8037	8030	8013	7995	8007	7994	7978	7965	1.4	-0.5	-0.5	8076	8039	8002
10. Mining	748	758	768	783	792	794	797	800	805	813	-0.4	6.4	4.1	718	764	796
11. Contract Construction	5445	5307	5172	5156	5143	5151	5183	5192	5229	5236	3.4	-0.5	-1.9	5299	5270	5167
12. Transport & Communication	5863	5893	5912	5893	5871	5846	5870	5894	5906	5916	2.8	3.2	-0.3	5705	5890	5870
13. Transportation	3648	3673	3700	3684	3665	3645	3665	3685	3692	3700	5.4	4.6	-0.3	3515	3676	3665
14. Communication	2215	2219	2212	2209	2206	2201	2205	2209	2214	2216	-1.1	1.1	-0.4	2191	2214	2205
15. Trade	26136	26163	26231	26279	26347	26359	26459	26551	26694	26846	2.7	1.5	0.9	25811	26202	26429
16. Retail Trade	19800	19818	19868	19901	19955	19982	20068	20133	20239	20348	2.4	1.4	0.9	19576	19847	20035
17. General Merchandise	2468	2444	2448	2440	2437	2433	2439	2441	2449	2456	1.0	-1.4	-0.5	2484	2450	2438
18. Food	3362	3383	3405	3423	3442	3461	3483	3501	3526	3553	5.5	3.8	2.3	3269	3393	3472
19. Automobiles	2172	2173	2175	2172	2173	2170	2172	2171	2178	2184	3.2	0.7	-0.1	2157	2173	2172
20. Eating	6469	6504	6544	6581	6623	6651	6693	6728	6758	6786	1.4	2.4	2.3	6369	6524	6674
21. Other	5330	5314	5296	5285	5280	5267	5281	5292	5328	5369	2.3	0.2	-0.5	5297	5306	5280
22. Wholesale Trade	6335	6345	6363	6378	6392	6377	6391	6418	6455	6498	3.4	1.9	0.6	6235	6355	6395
23. Durable	3758	3757	3765	3773	3780	3769	3776	3789	3814	3841	3.8	1.8	0.4	3696	3763	3779
24. Nondurable	2577	2588	2598	2605	2612	2608	2615	2629	2641	2657	2.9	2.1	0.9	2539	2592	2616
25. Finance, Insurance and Real Estate	6911	6928	6950	6953	6958	6961	6980	7002	7024	7046	2.2	1.8	0.6	6814	6936	6975
26. Services	27683	27858	28006	28186	28363	28487	28697	28920	29149	29336	5.0	3.9	2.4	26892	27933	28617
27. Government	18024	18371	18281	18262	18313	18407	18463	18508	18574	18676	2.0	2.9	1.0	17728	18235	18423
28. Federal	3031	3255	3084	3013	2973	2969	2961	2953	2946	2939	0.6	3.6	-4.3	2988	3096	2964
29. State & Local	14993	15117	15197	15249	15340	15438	15502	15555	15628	15737	2.4	2.7	2.1	14740	15139	15459
30. Total Payroll	110221	110652	110657	110698	110904	110912	111397	111802	112327	112773	2.8	1.8	0.6	108584	110557	111254
31. Unemployment Rate	5.2	5.3	5.5	5.8	5.9	6.2	6.2	6.3	6.2	6.2	-14.9	3.7	12.6	5.3	5.5	6.2

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